

# Service Manual

**74 DP870/02B**  
**DP870 KBL, KGL, FBL, UBL**  
**Digital Processor**



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Please use this service manual with referring to the user guide (D.F.U) without fail.  
修理の際は、必ず取扱説明書を準備し操作方法を確認の上作業を行ってください。

# marantz®

## model DP870

## MARANTZ DESIGN AND SERVICE

Using superior design and selected high grade components, **MARANTZ** company has created the ultimate in stereo sound. Only original **MARANTZ** parts can insure that your **MARANTZ** product will continue to perform to the specifications for which it is famous.

Parts for your **MARANTZ** equipment are generally available to our National Marantz Subsidiary or Agent.

### ORDERING PARTS :

Parts can be ordered either by mail or by Fax.. In both cases, the correct part number has to be specified.

The following information must be supplied to eliminate delays in processing your order :

1. Complete address
2. Complete part numbers and quantities required
3. Description of parts
4. Model number for which part is required
5. Way of shipment
6. Signature : any order form or Fax. must be signed, otherwise such part order will be considered as null and void.

#### USA

**MARANTZ AMERICA, INC.**  
440 MEDINAH ROAD  
ROSELLE, ILLINOIS 60172- 2330  
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29, LENG KEE ROAD  
SINGAPORE 159099,  
PHONE : +65 475 - 4555  
FAX : +65 475 - 8623

### SHOCK, FIRE HAZARD SERVICE TEST :

**CAUTION :** After servicing this appliance and prior to returning to customer, measure the resistance between either primary AC cord connector pins ( with unit NOT connected to AC mains and its Power switch ON ), and the face or Front Panel of product and controls and chassis bottom.

Any resistance measurement less than 1 Megohms should cause unit to be repaired or corrected before AC power is applied, and verified before it is return to the user/customer.

Ref. UL Standard NO. 1492.

In case of difficulties, do not hesitate to contact the Technical  
Department at above mentioned address.

## 1. TECHNICAL SPECIFICATIONS

### Output Level/Output Impedance

MAIN L/R, CENTER, SURROUND L/R

1 KHz, 0 dB INPUT 0~3.5 V / 500  $\Omega$

SUBWOOFER

50 Hz, 0 dB INPUT 0~9 V / 500  $\Omega$

Input Impedance ( RF, COAXIAL ) 75  $\Omega$

### Frequency Response

MAIN L/R, CENTER, SURROUND L/R ( LARGE )

20 Hz-20 KHz  $\pm 0.5$ dB

### Filter Characteristics

MAIN L/R, CENTER, SURROUND L/R ( SMALL )

H.P.F.  $f_c=100$  Hz, 12 dB/oct.

SUBWOOFER

L.P.F.  $f_c=100$  Hz, 24 dB/oct.

### Total Harmonic Distortion

MAIN L/R, CENTER, SURROUND L/R ( 1 KHz ) 0.01% or less

SUBWOOFER ( 50 Hz ) 0.1% or less

Signal to Noise Ratio ( IHF-A ) 98 dB

Channel Separation ( 1 KHz ) 80 dB

Power Consumption 30 W

AC OUTLET : UNSWITCHED 200 W max.

Dimensions ( W/H/D ) 17-3/8 in x 3-3/8 in x 10-7/8 in

444 mm x 85 mm x 303 mm(MAX)

Weight 9.4 lds. ( 4.2 kg. )

Specifications and components are subject to change without notice.

Overall performance will be maintained or improved.

Note : "RESET" operation is necessary to initialize the microprocessor (QL01) after every repair.

"RESET" procedures is follow.

Short "B-RST" terminals on the Side-B of PCB (P604) in a couple of seconds.

注意：修理後、マイコンを初期化するために、必ず、リセット操作をして下さい。

リセットの仕方は 以下の通りです。

電源OFFの状態、基板 (P604)のSide-BにあるB-RST端子を 2-3秒間ショートして下さい。

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"Dolby", "AC-3" and the double-D symbol are trademarks of Dolby Laboratories Licensing Corporation.

## 2. TECHNICAL DESCRIPTION

This product is a "Dolby Digital (AC-3)" decoder. By connecting this product with a Dolby digital compatible component equipped with the Dolby AC-3 RF output such as a LD player, DVD player or DBS tuner, it will be capable of 5.1 CH (Front L/R, Rear L/R, Center and Sub-woofer) play.

Signal path

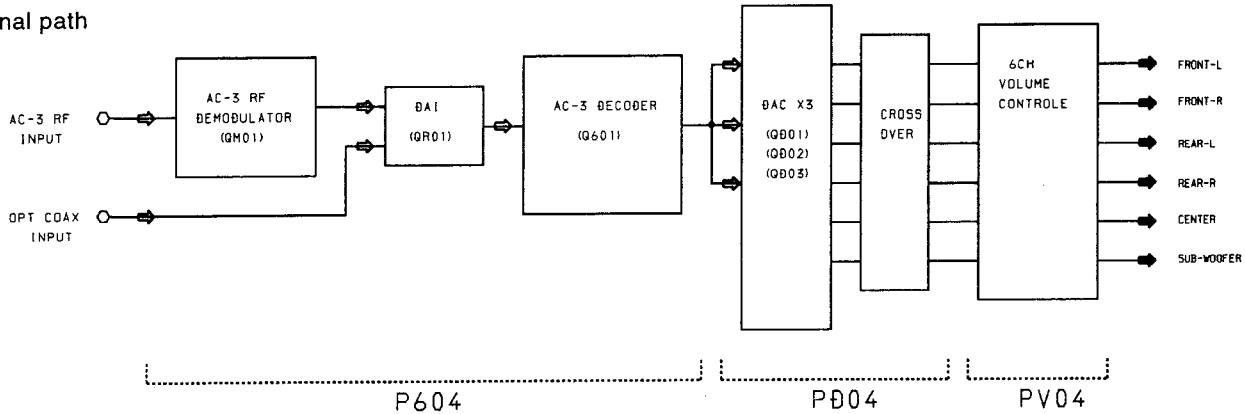


Figure 1

## 3. SIGNAL AND CIRCUIT DESCRIPTION

### AC-3 RF

This signal is based on the Dolby Digital format for Laser Discs, and contains the AC-3 signal inserted in one of the analog audio channels of LD. See diagram below (Figure 2).

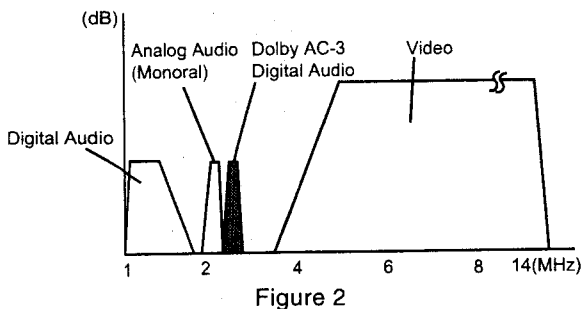


Figure 2

With this signal, the RF signal from the LD player (the signal read out with the pickup) is output as it is.

### OPT/COAX (AC-3/PCM input)

This signal is based on an additional format for transmitting the AC-3 data through the conventional digital audio interface (SPDIF). In case of PCM signal, this signal contains the compressed AC-3 data overlapped in the audio data section. Similarly to the case of ROM data, whether the data is audio or non-audio is identified according to the status in the signal. This signal can be output from a DVD player, etc.

### AC-3 RF modulator

This circuit extracts the AC-3 data band from the RF signal output from a LD player using a BPF and converts the extracted data into the digital signal in the SPDIF format by means of QPSK modulation.

### DAI (Digital Audio Interface) receiver

This circuit extracts various clock and data signals from the signal input in the SPDIF format.

### AC-3 decoder DSP

This circuit generates the 6-channel data (Front L/R, Rear L/R, Center and LFE) based on the data output from the DAI, and outputs the 6-channel data to the DAC as 3 sets of 2-channel data.

### Crossover

This circuit divides the signal output of no more than 100 Hz according to the low-frequency reproduction capability of the speakers used by the user. It is controlled according to the switching of the HPF of each channel, mixing in the sub-woofer channel, etc.

本製品は”DOLBY DIGITAL (AC-3)”用DECODERである。

DOLBY AC-3 RF出力付LD PLAYER, DVD PLAYER, DBSなどのDOLBY DIGITAL  
対応機器と接続する事により5.1CH(FRONT L/R, REAR L/R, CENTER,  
SUB-WOOFER)再生を行う。

本製品は大きく分けるとAC-3 DECODER部(P604), DAC & CROSSOVER部(PD04), POWER SUPPLY部(P804), VOLUME CONTROL部(PV04), FRONT KEY入力部(PU04)など5のBLOCKにて構成される。信号経路図参照 Figure 1

### 3. 各種信号及び回路BLOCK説明

## AC-3 RF

DOLBY DIGITALのLASER DISC用フォーマットであり、LDのANALOG音声部の片CHに、AC-3用の信号を入れたものである。図参照(Figure 2)

LD PLAYERのRF信号(PICKUPの読み取り信号)がそのまま出力されてくる。

## OPT/COAX (AC-3/PCM INPUT)

従来のDIGITAL AUDIO INTERFACE (SPDIF) を用いてAC-3用DATAを送信する追加フォーマット。  
PCMの場合の音声DATA部にAC-3の圧縮DATAを乗せた信号である。  
ROM DATAの場合と同様に信号内のSTATUSにより、音声DATAか、非音声DATAかを識別する。  
DVD PLAYERなどが出力機能を持っている。

## AC-3 RF DEMODULATOR

LD PLAYERから出力されたRF信号内のAC-3 DATA帯域をBPFにより抽出し、QPSK変調によりSPDIFフォーマットのDIGITAL信号へ変換する。

DAI (DIGITAL AUDIO INTERFACE RECEIVER)

SPDIFフォーマットにて入力された信号から各種CLOCK, DATAを抽出する。

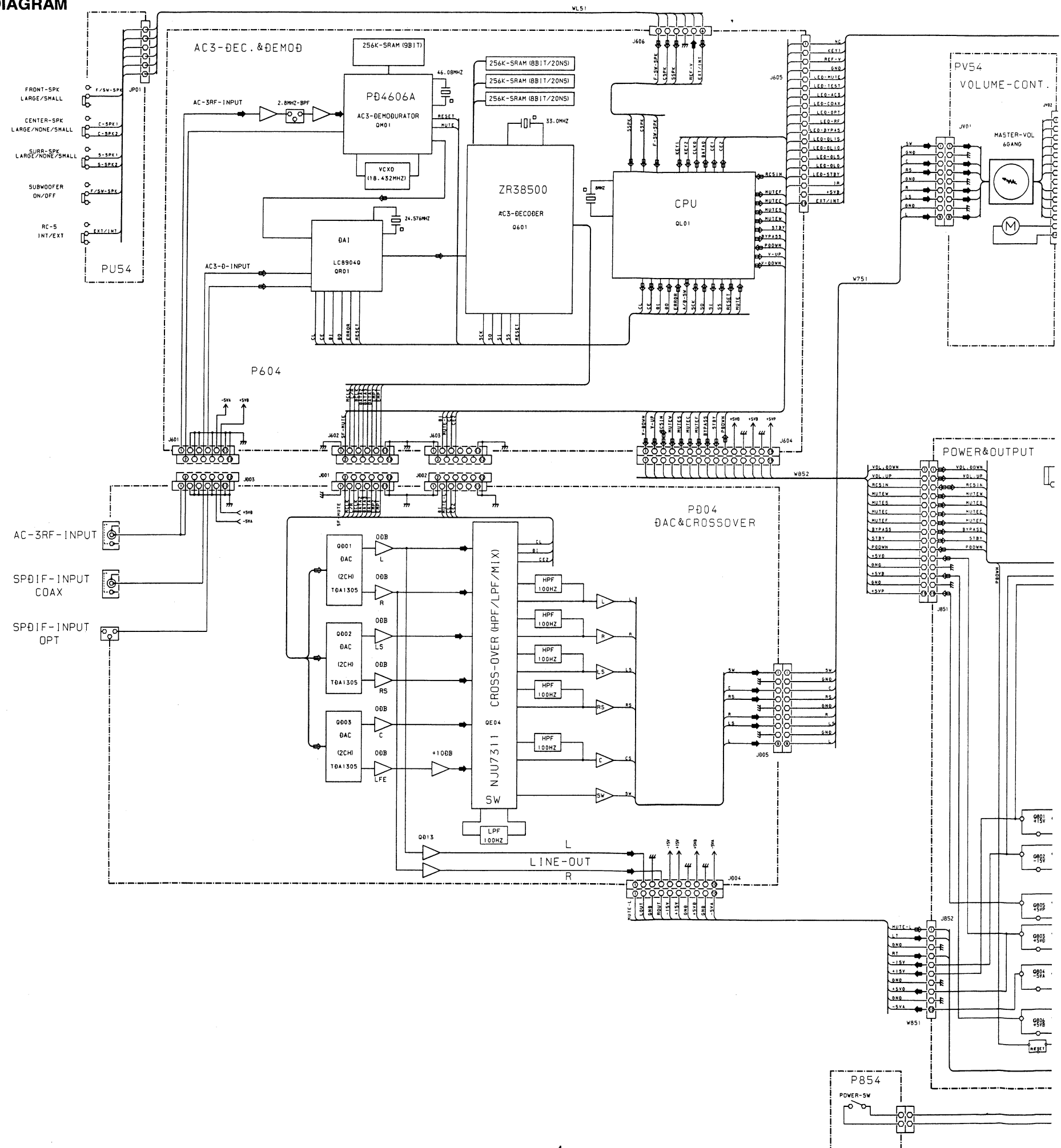
## AC-3 DECODE DSP

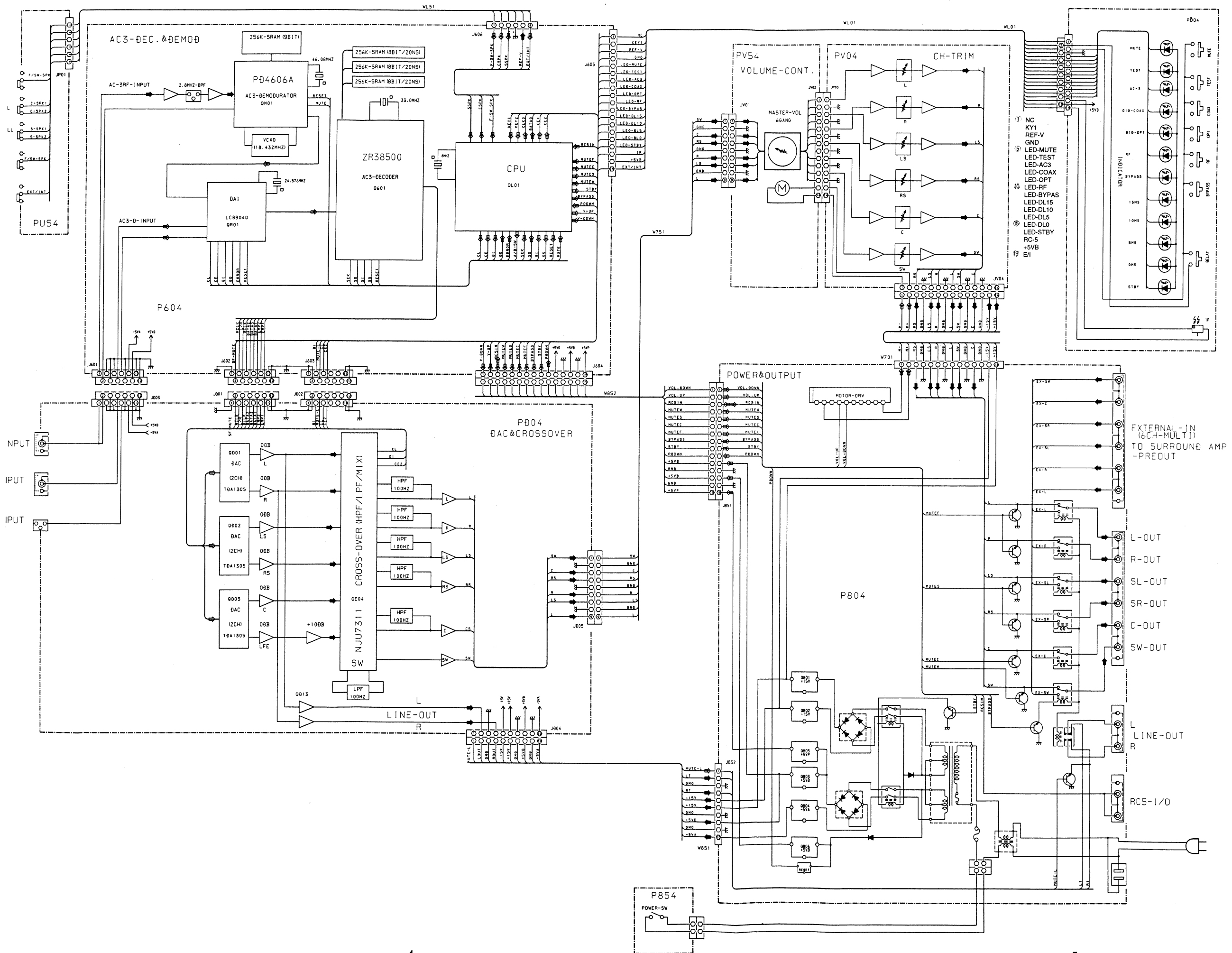
DAIから出力されるDATAから6CH-DATA(FRONT L/R, REAR L/R, CENTER, LFE)を生成する。そして2CH-DATA x3としてDACへ出力する。

## CROSS OVER

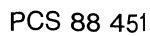
USERが使用するSPEAKERの低域再生能力によって100Hz以下の信号の出力分割を行う。各CHのHPFの切り替え、SUB-WOOFER CHへのMIX等によりコントロールされる。

#### 4. BLOCK DIAGRAM

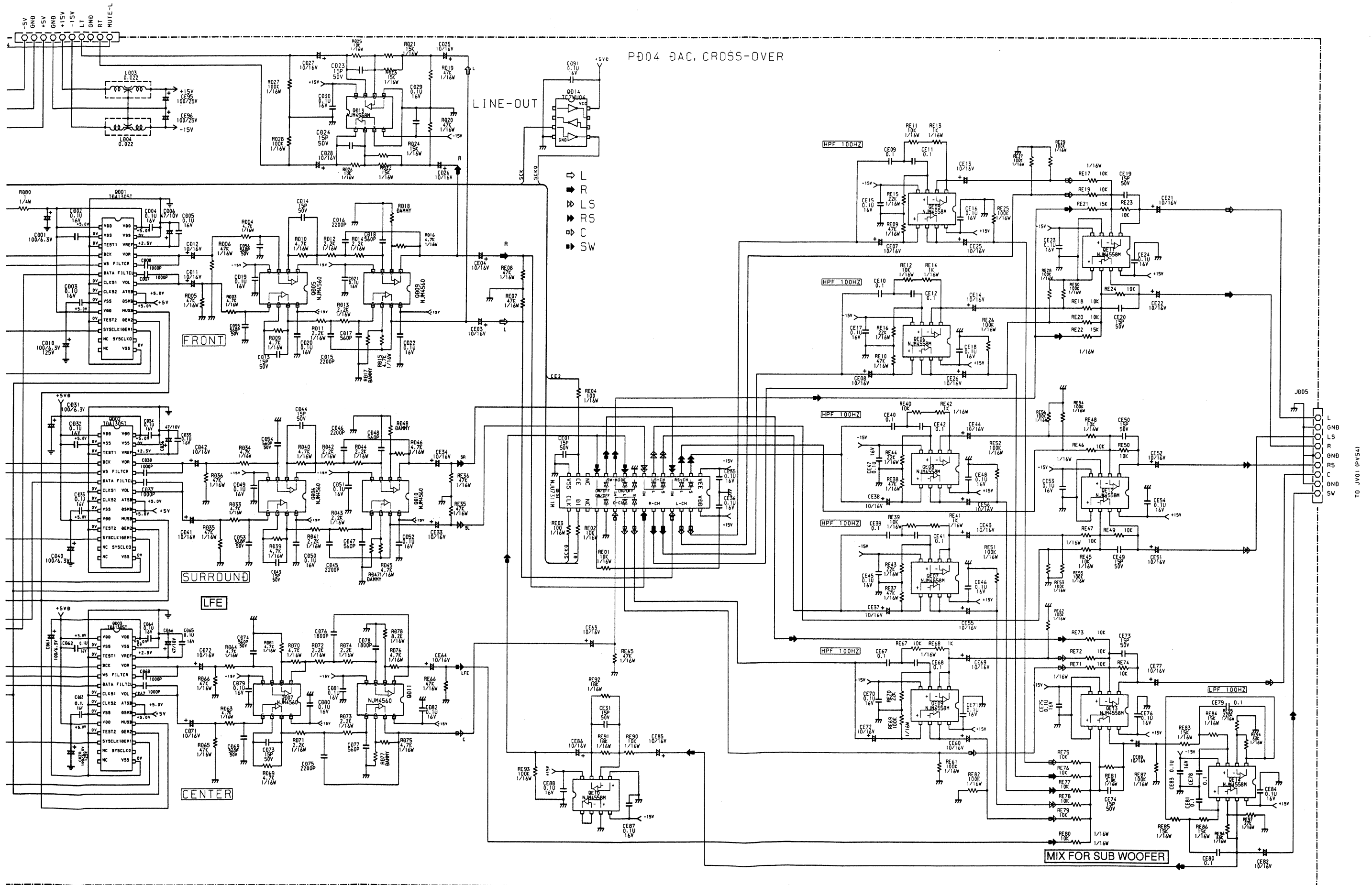




## SCHEMATIC DIAGRAMS (1)



FROM P804 (BY W851)

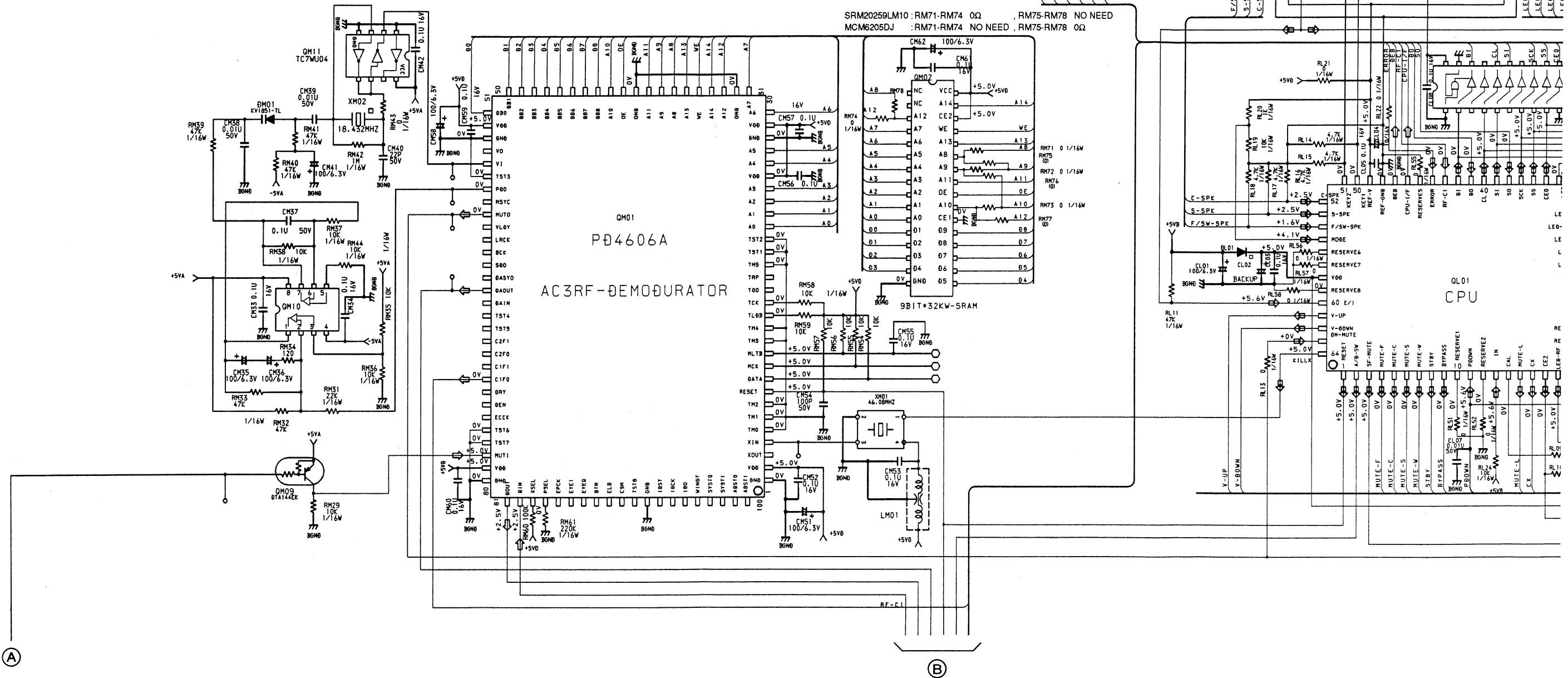




## SCHEMATIC DIAGRAMS (2-1/2)

## P604-AC-3 DECODER

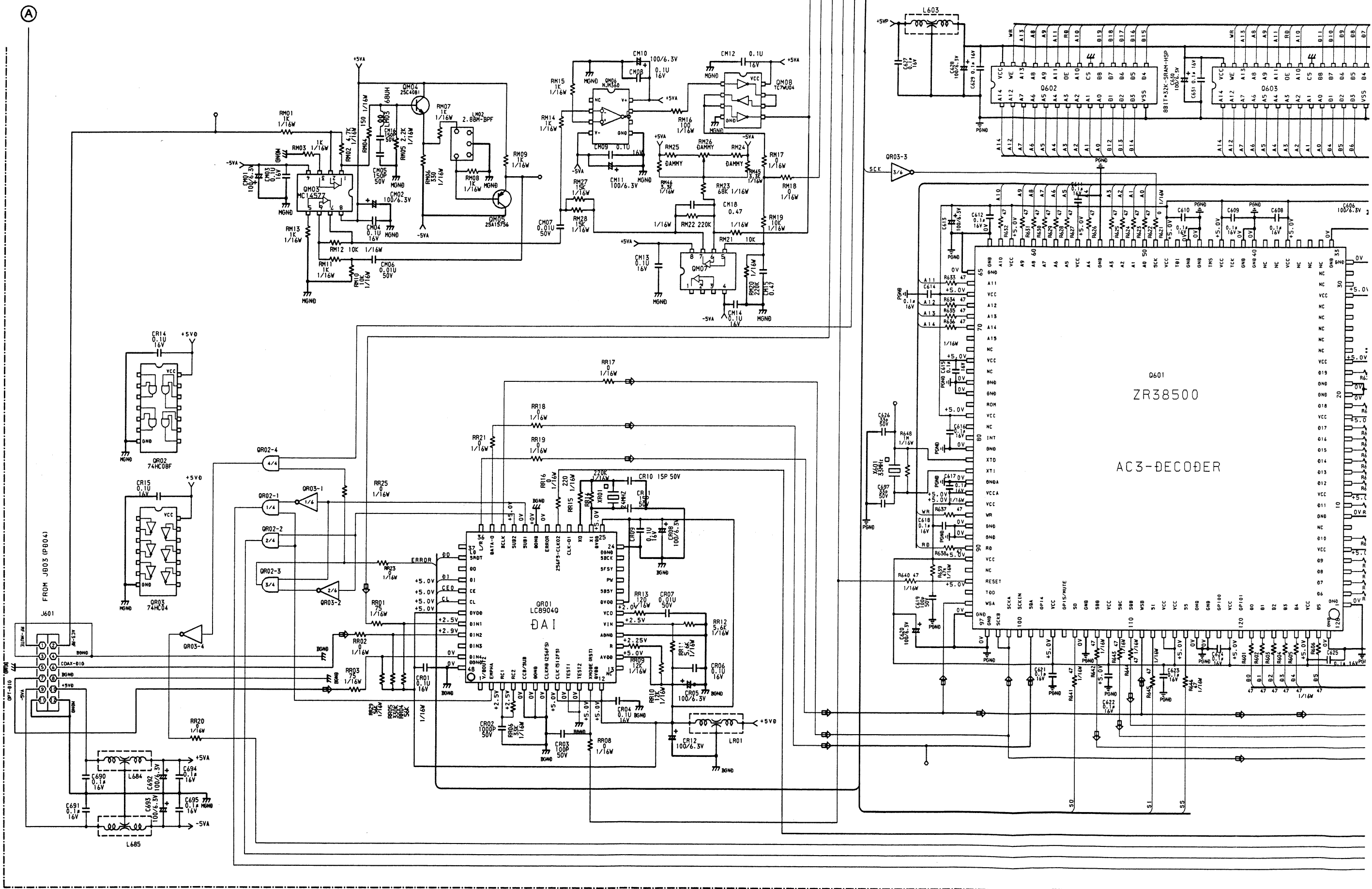
AC-3 DECODER

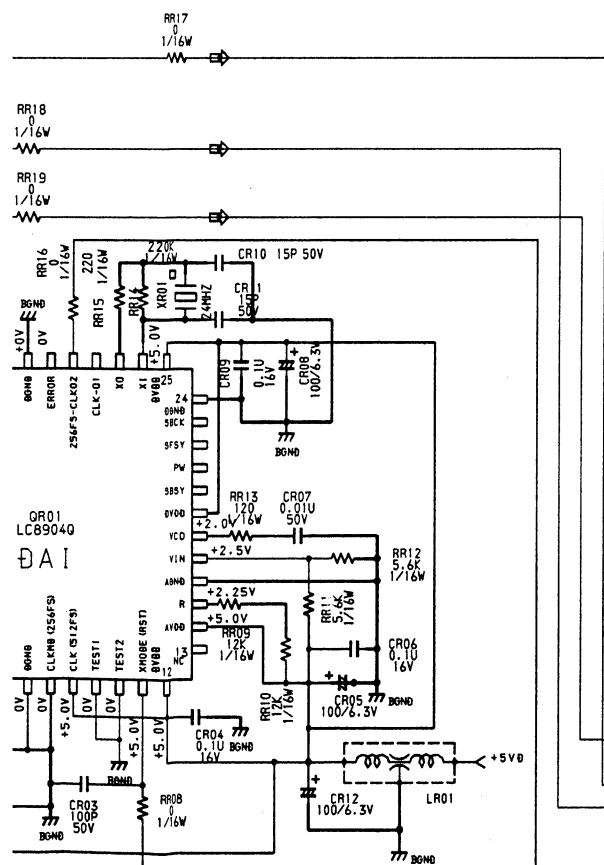




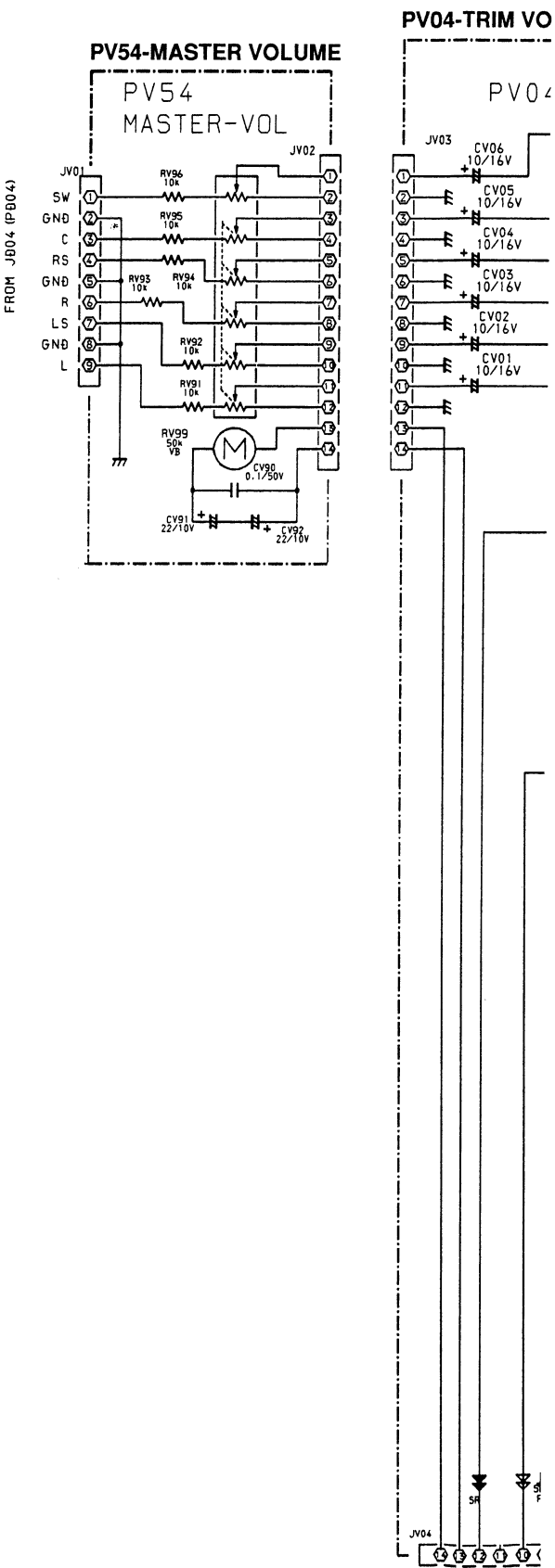
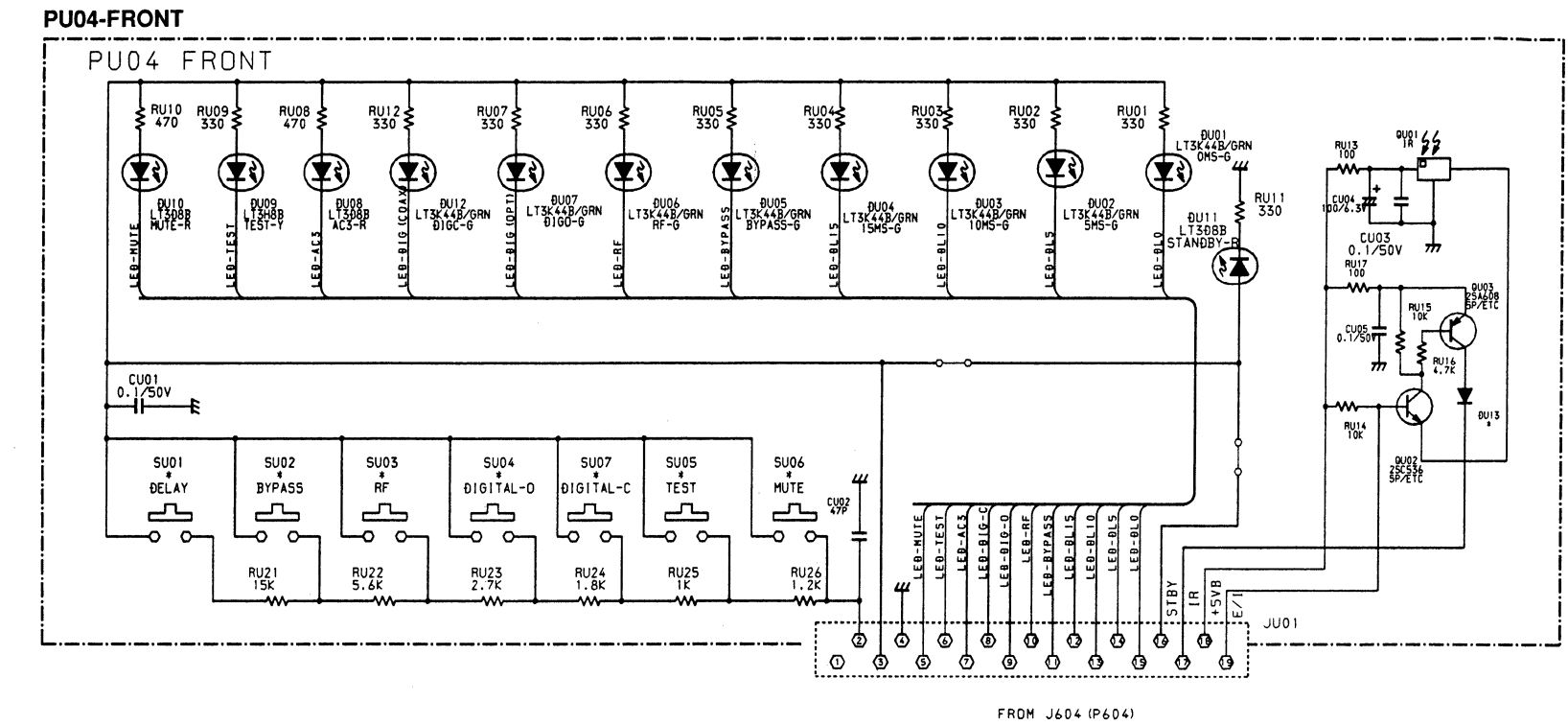
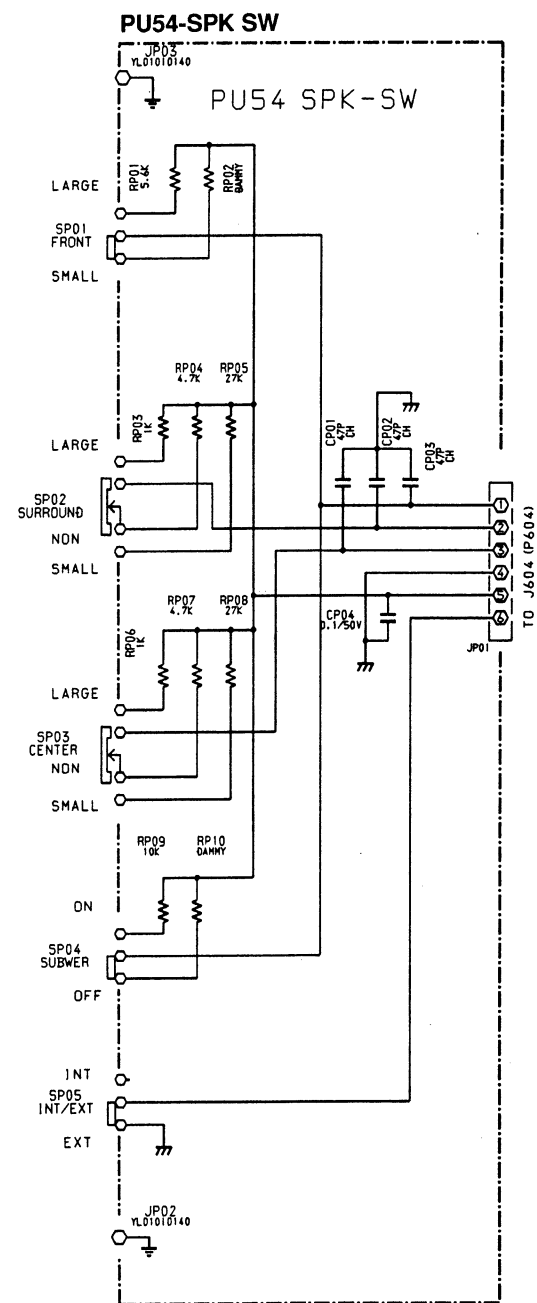
SCHEMATIC DIAGRAMS (2-2/2)

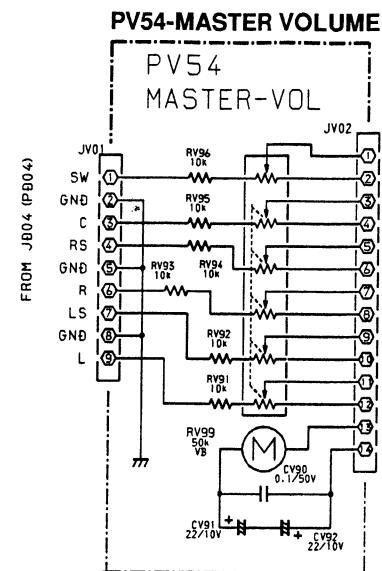
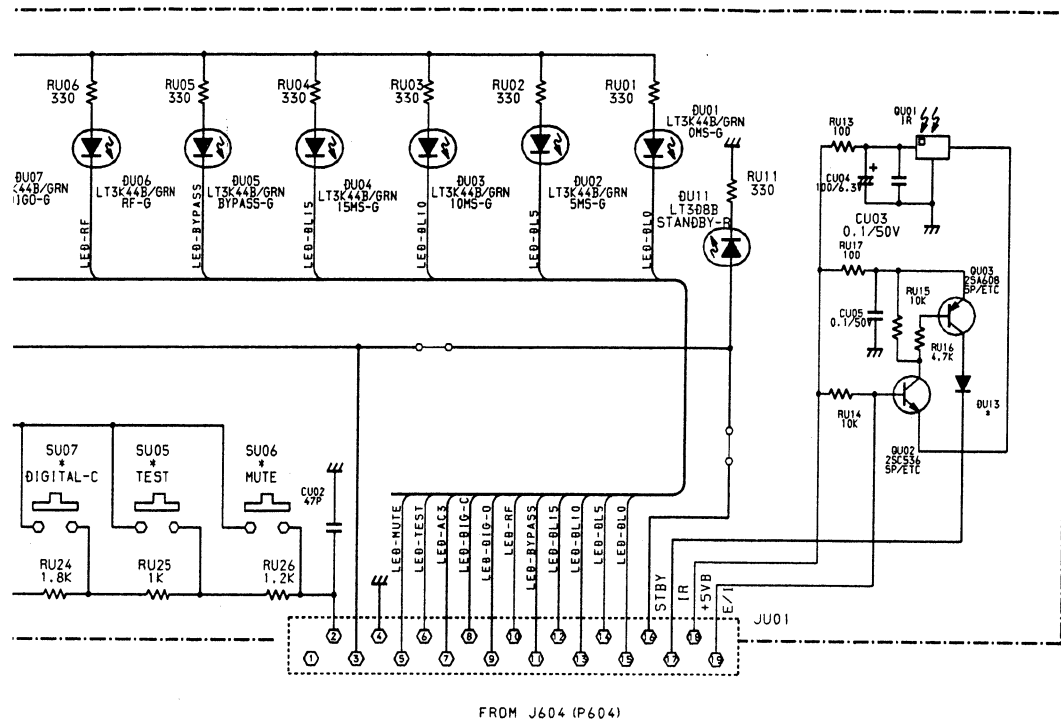
P604-AC-3 DECODER



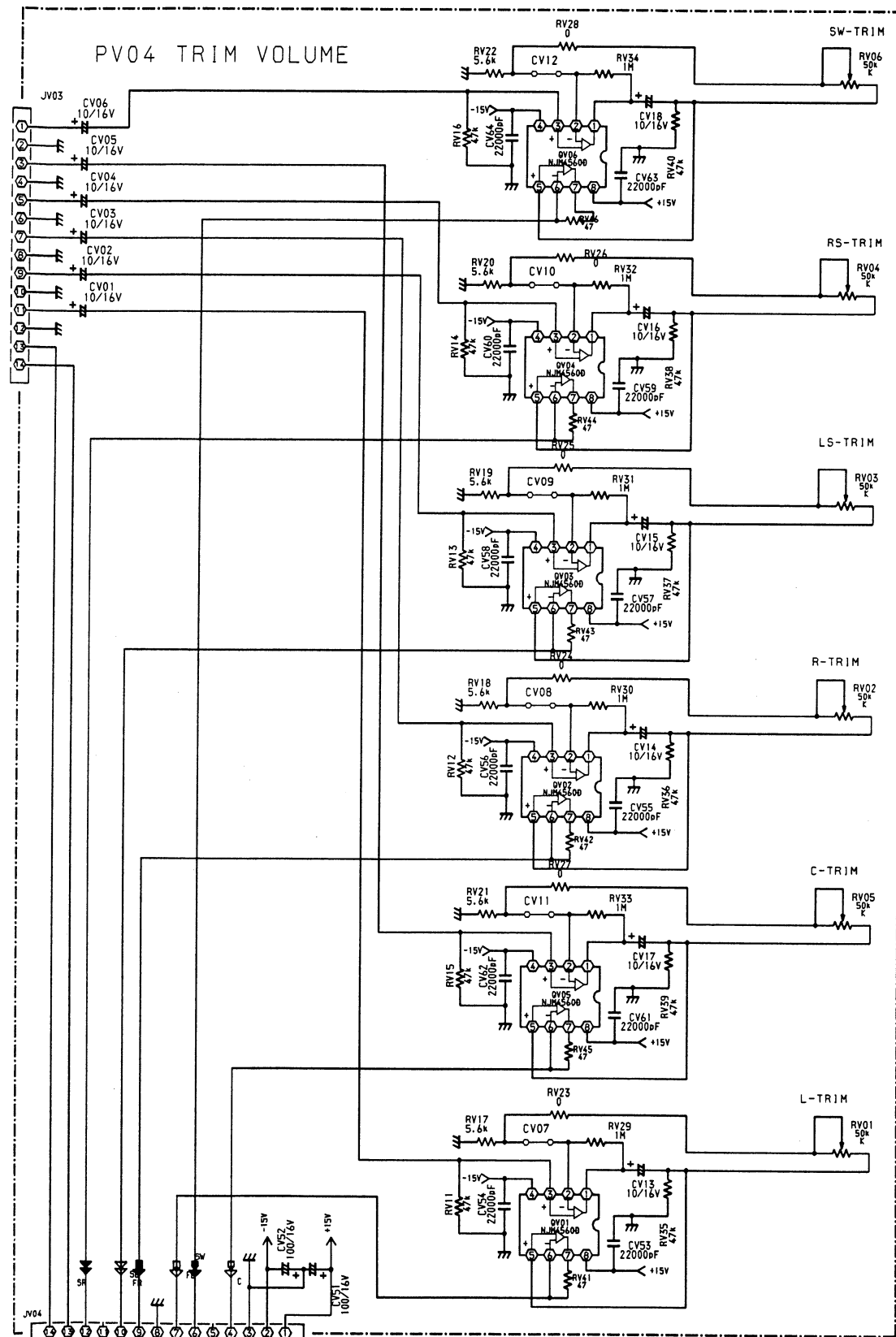


SCHEMATIC DIAGRAMS (3)





# PV04-TRIM VOLUME



PCS 88 455

**P884 VOLTAGE SELECT**

230V

115V

F881  
T160NA/250V

J883

J884

J885

F882

J886

S881

J881

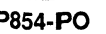
J882

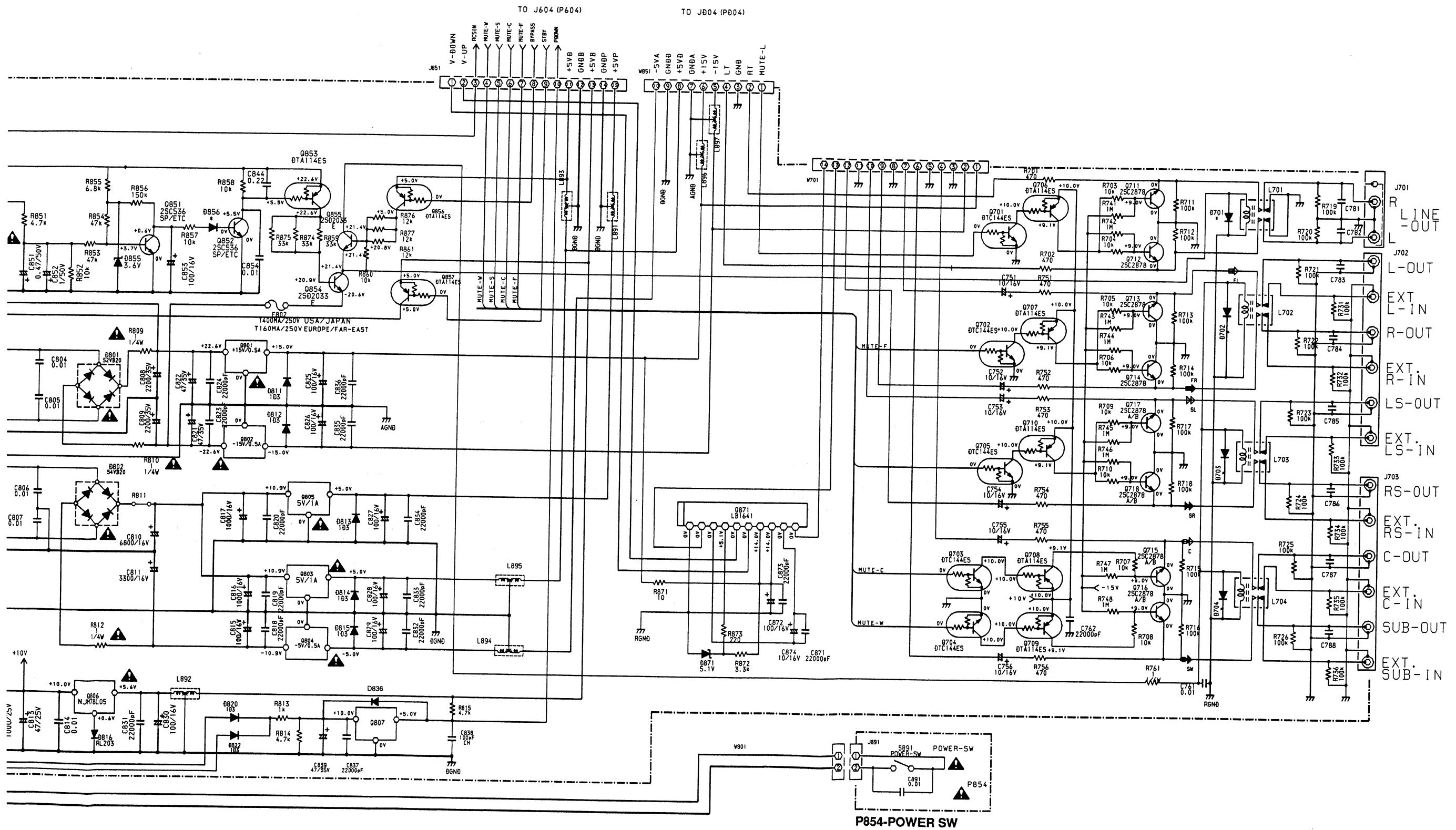
L001  
MAIN TRANSF

TO J807

TO J804

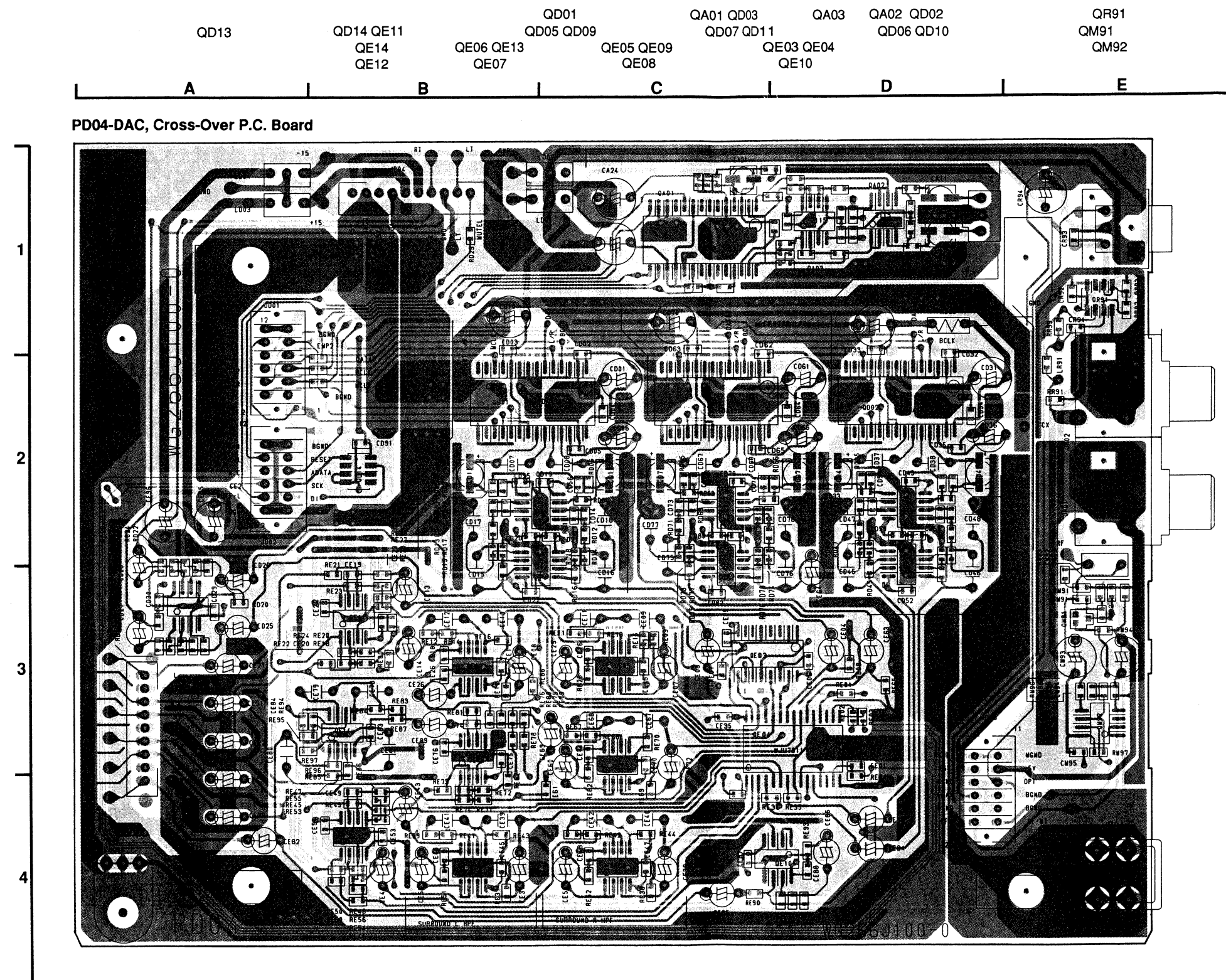
P804 POWER



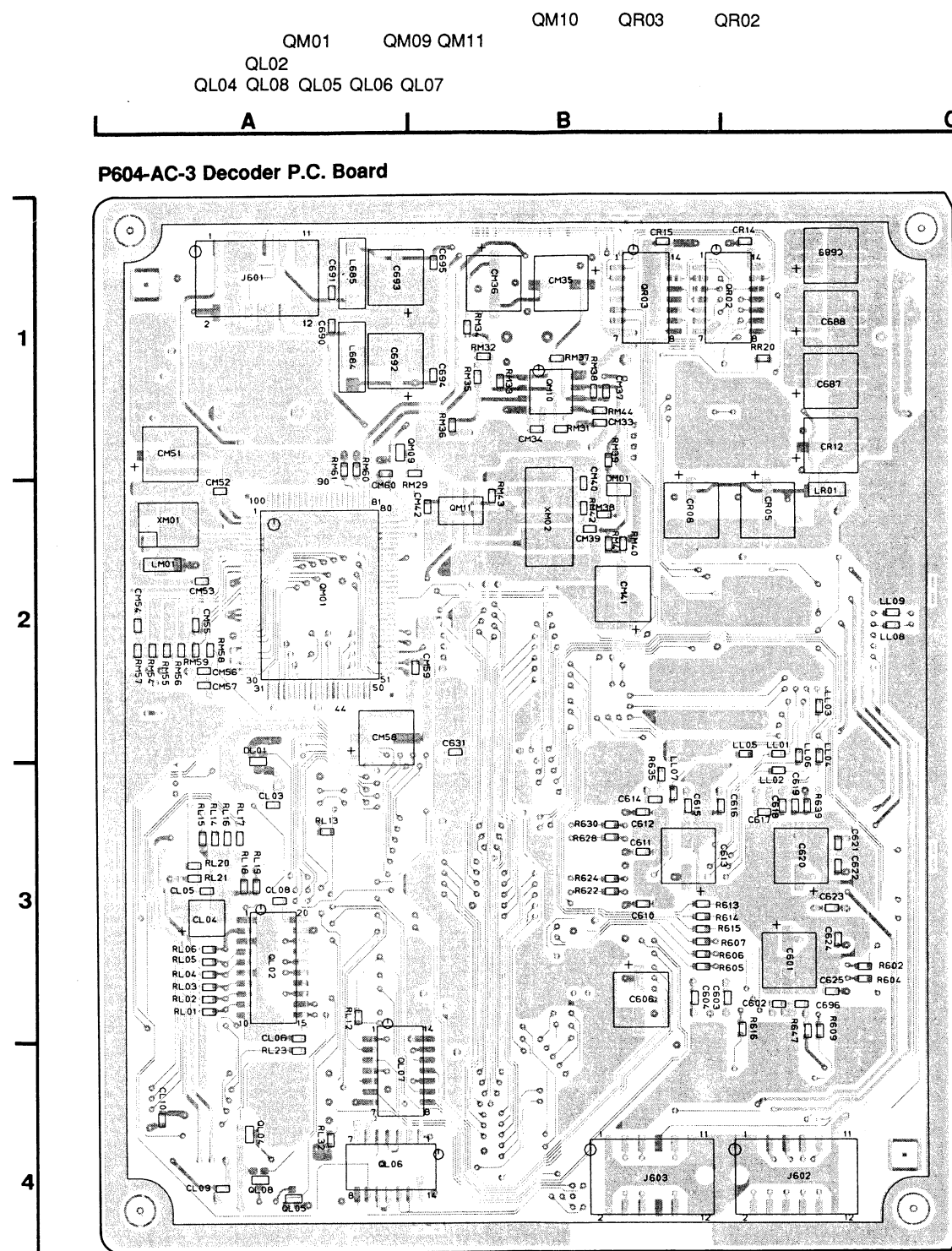




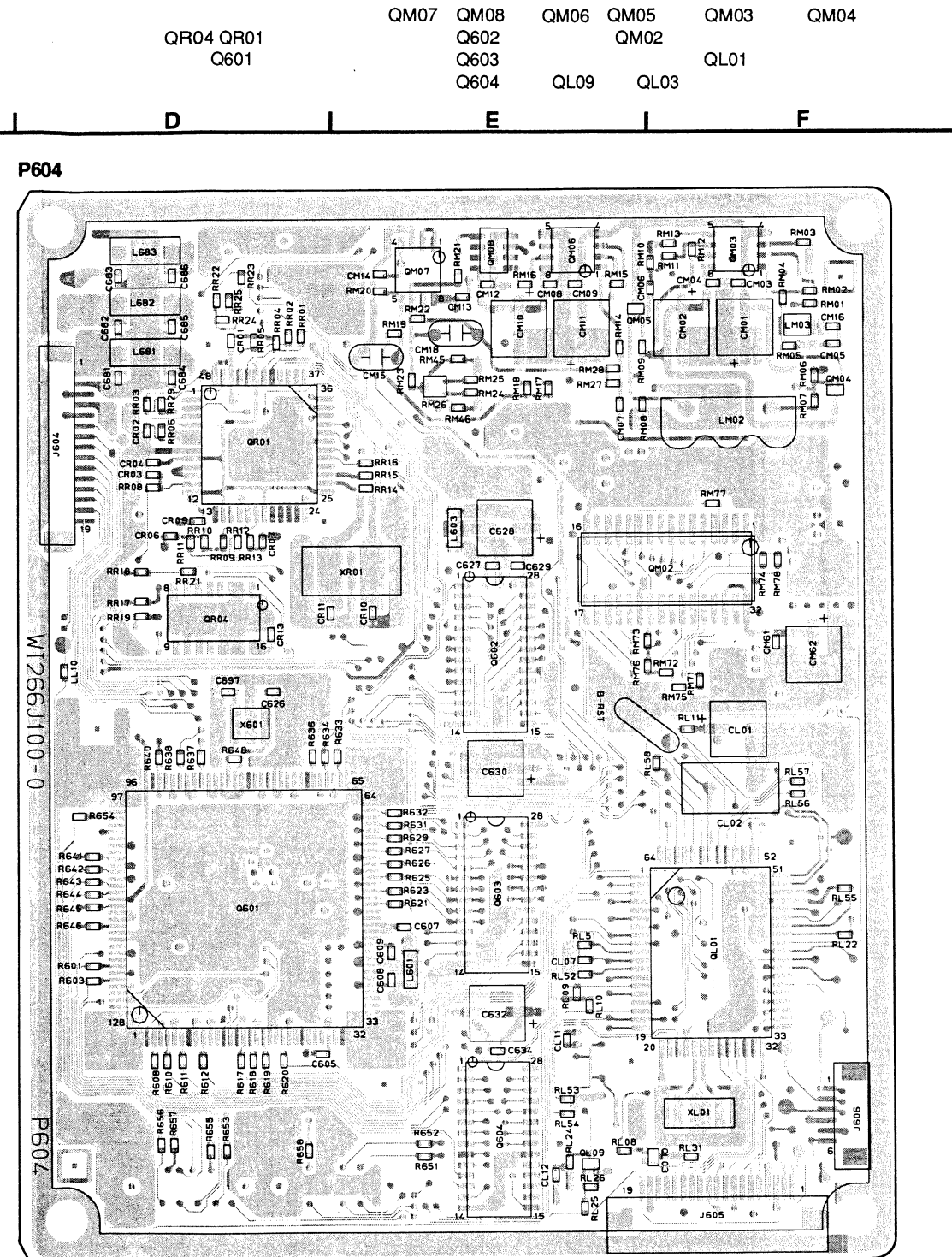
## P.C. BOARDS (1)



## P.C. BOARDS (2)



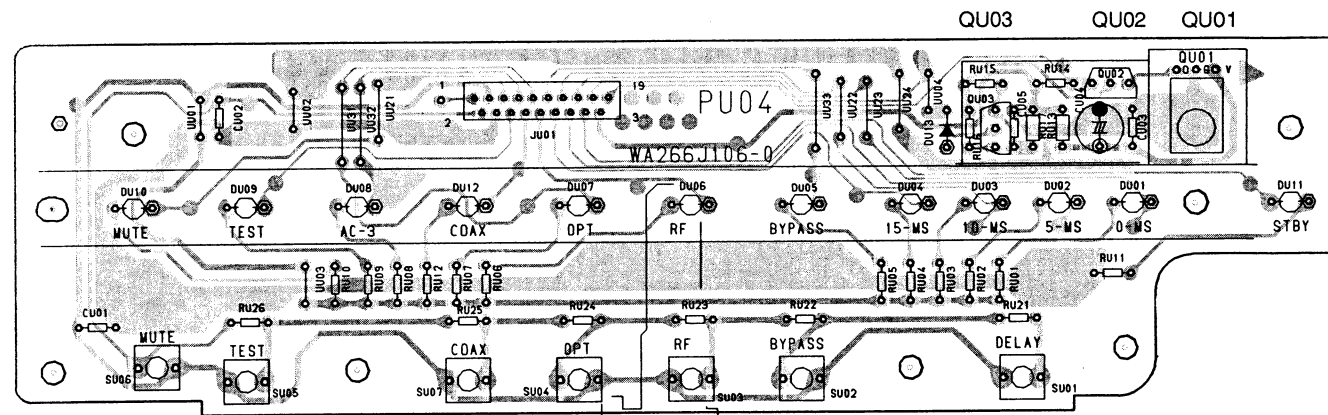
### Side-A



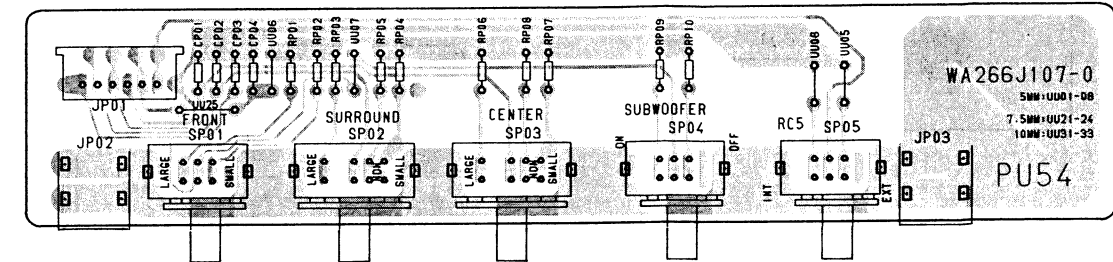
### Side-B

### P.C. BOARDS (3)

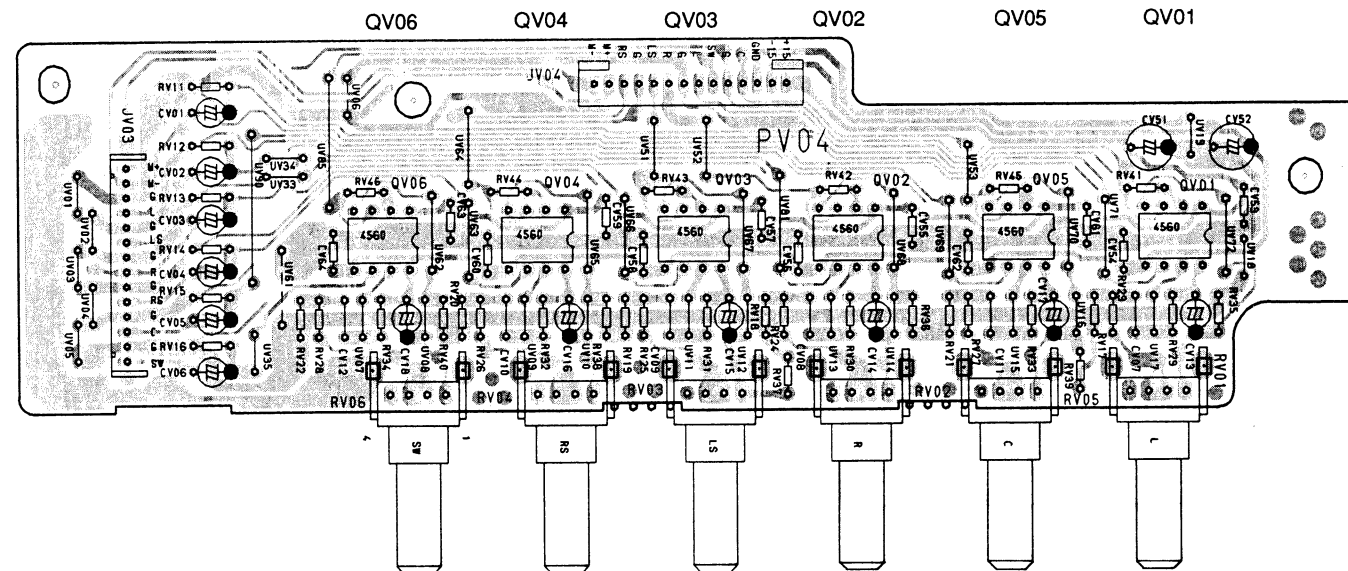
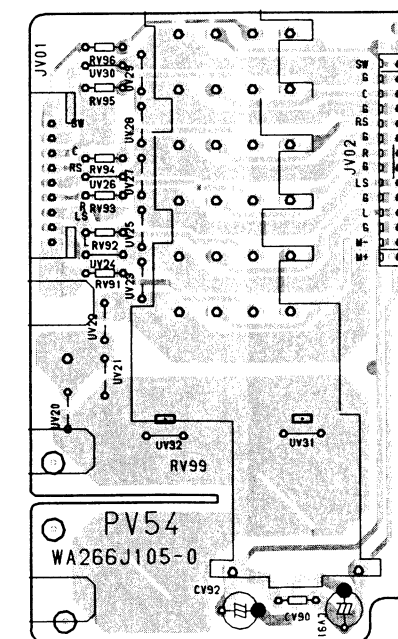
### PU04-Front P.C. Board



## PU54-SPK SW P.C. Board

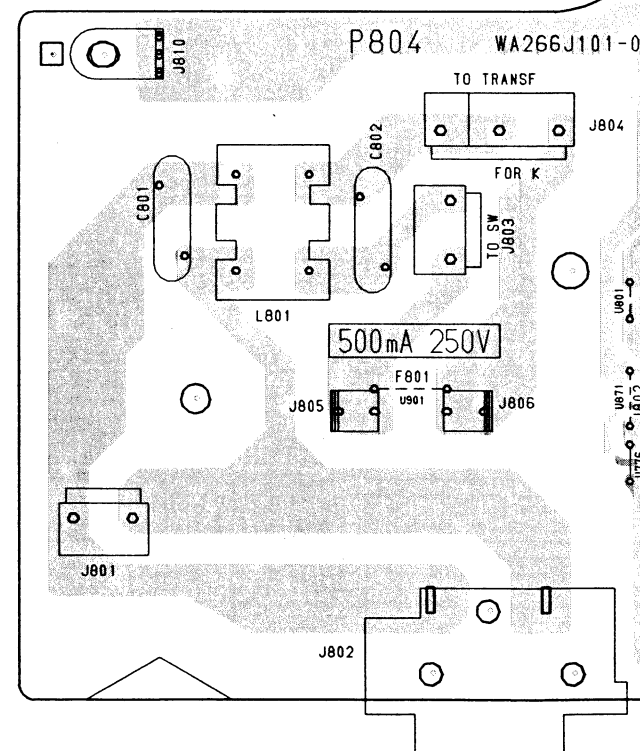
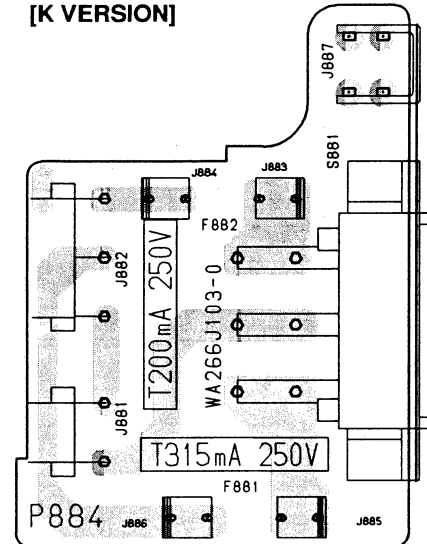
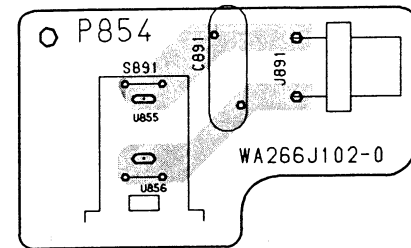
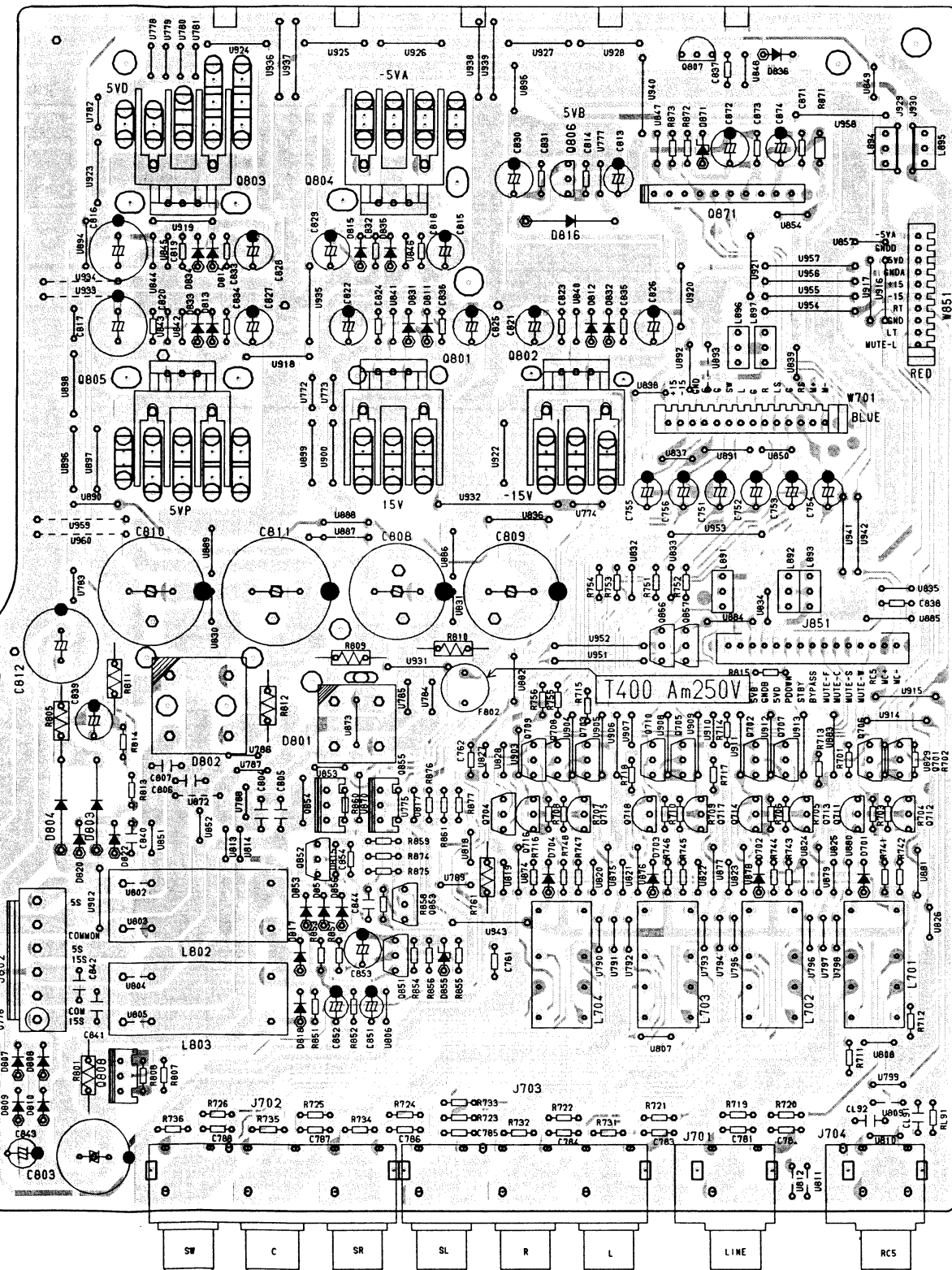


### PV04-Trim Volume P.C. Board

**PV54-Master Volume P.C. Board**



PCS 88 459

[illegible]

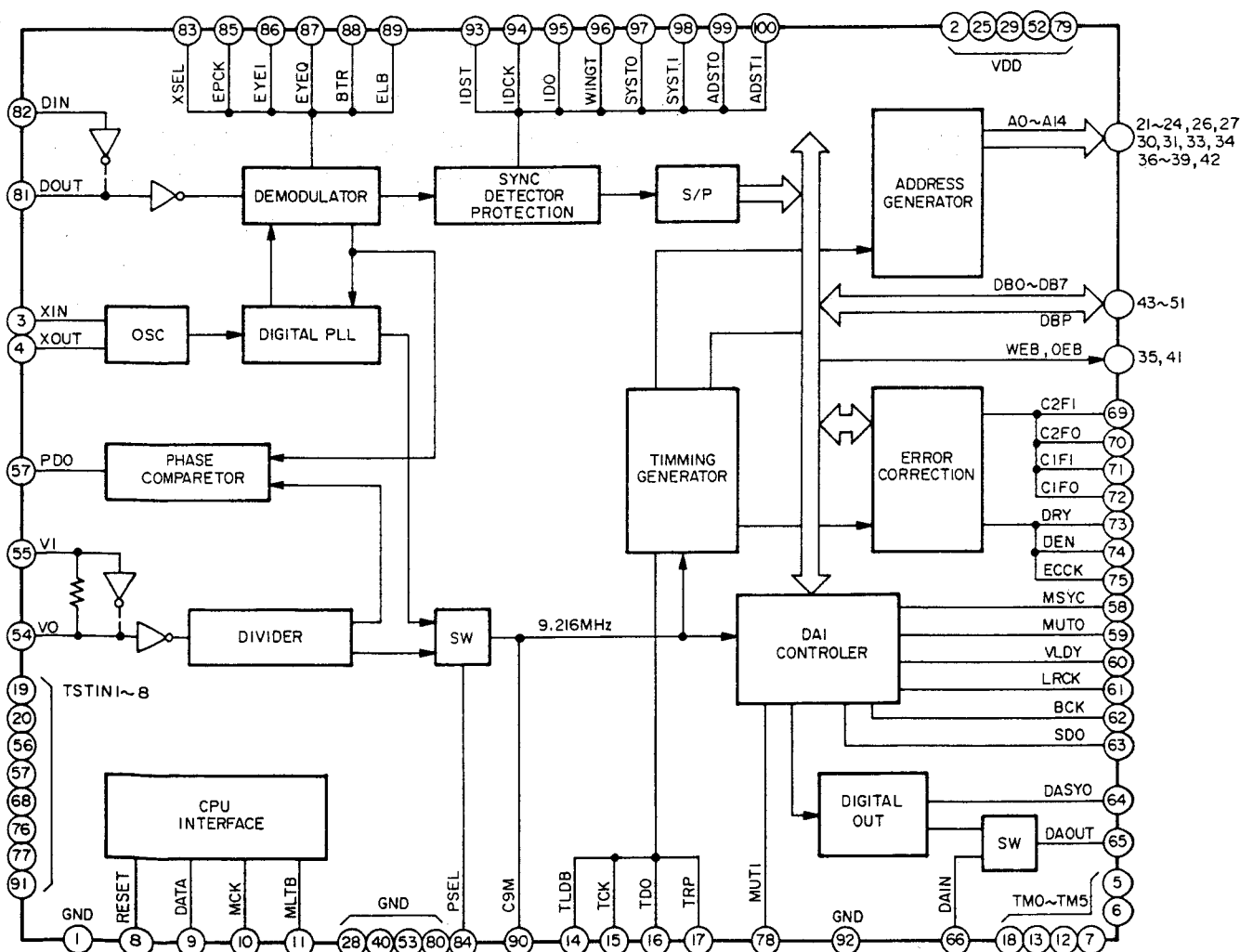
## 6. IC BLOCK DIAGRAMS

### QM01 TERMINAL FUNCTIONS

Pin No.	Pin Name	I/O	Pin Function
1	GND	-	Ground (0V).
2	VDD	-	Power supply (+5V).
3	XOUT	O	X'tal oscillator output.
4	XIN	I	X'tal oscillator input.
5	TM0	I	IC test mode setting terminal. Usually no connection.
6	TM1	I	IC test mode setting terminal. Usually no connection.
7	TM2	I	IC test mode setting terminal. Usually no connection.
8	RESET	I	System reset terminal. Reset with "L". Goes "L" temporarily after power is turned ON.
9	DATA	I	Serial data input from CPU. (LSB first)
10	MCK	I	Serial clock input from CPU. Data is latched at the positive-going edge of the clock.
11	ML TB	I	CPU input latch. Latches the serial data (8 bits at a time) from the CPU into a register.
12	TM3	I	IC test mode setting terminal. Usually no connection.
13	TM4	I	IC test mode setting terminal. Usually no connection.
14	TLDB	I	Tag code load signal. "L" loads tag code in a 16-bit shift register.
15	TCK	I	Tag code output clock. Data is output at the positive-going edge of the clock.
16	TDO	O	Tag code serial data output. (MSB first)
17	TRP	O	Tag code update signal. Goes "H" when no error is found in the tag codes after the correction operation of each block.
18	TM5	I	IC test mode setting terminal. Usually no connection.
19	TSTIN1	I	IC test terminal. Usually no connection.
20	TSTIN2	I	IC test terminal. Usually no connection.
21	A0	O	External RAM address output. Address 0 (LSB).
22	A1	O	External RAM address output. Address 1.
23	A2	O	External RAM address output. Address 2.
24	A3	O	External RAM address output. Address 3.
25	VDD	-	Power supply (+5V).
26	A4	O	External RAM address output. Address 4.
27	A5	O	External RAM address output. Address 5.
28	GND	-	Ground (0V).
29	VDD	-	Power supply (+5V).
30	A6	O	External RAM address output. Address 6.
31	A7	O	External RAM address output. Address 7.
32	GND	-	Ground (0V).
33	A12	O	External RAM address output. Address 12.
34	A14	O	External RAM address output. Address 14 (MSB).
35	WEB	O	External RAM write enable output. "L" active.
36	A13	O	External RAM address output. Address 13.
37	A8	O	External RAM address output. Address 8.
38	A9	O	External RAM address output. Address 9.
39	A11	O	External RAM address output. Address 11.
40	GND	-	Ground (0V).
41	OEB	O	External RAM output enable output. "L" active.
42	A10	O	External RAM address output. Address 10.
43	DBP	I/O	External RAM data terminal. For use as the erasure pointer.
44	DB7	I/O	External RAM data terminal. Data path 7.
45	DB6	I/O	External RAM data terminal. Data path 6.
46	DB5	I/O	External RAM data terminal. Data path 5.
47	DB4	I/O	External RAM data terminal. Data path 4.
48	DB3	I/O	External RAM data terminal. Data path 3.
49	DB2	I/O	External RAM data terminal. Data path 2.
50	DB1	I/O	External RAM data terminal. Data path 1.
51	DB0	I/O	External RAM data terminal. Data path 0.
52	VDD	-	Power supply (+5V).
53	GND	-	Ground (0V).
54	V0	O	VCXO output.
55	V1	I	VCXO input.
56	TSTIN3	I	IC test terminal. Usually no connection.
57	PDO	O	Phase comparator output (3-state).
58	MSYC	O	"H" with AC-3 sync signal. For use in monitoring.
59	MUTO	O	Muting output. "H" for muting. Goes "H" when "MUTI = H" or the AC-3 signal is out of sync.
60	VLDY	O	Validity flag output. "L" indicate correct data and "H" indicates a possibility of error.
61	LRCK	O	L/R channel switching clock. 48kHz. "H" for L CH.
62	BCK	O	Bit clock. 3.072MHz.
63	SDO	O	Serial data output.
64	DASYO	O	Digital output preamble B identification signal.
65	DAOUT	O	Digital output.
66	DAIN	I	Digital audio interface signal input. The digital output which has been processed inside the IC or the signal from "DAIN" is selected according to the internal register setting and output at "DAOUT".
67	TSTIN4	I	IC test terminal. Usually no connection.
68	TSTIN5	I	IC test terminal. Usually no connection.
69	C2F1	O	C2 correction error state indication. Output indicating where correction completed or not.
70	C2F0	O	C2 correction error state indication. Output indicating the number of errors in C2.

Pin No.	Pin Name	I/O	Pin Function
71	C1F1	O	C1 correction error state indication. Output indicating whether an error is present or not in C1.
72	C1F0	O	C1 correction error state indication. Output indicating the number of errors in C1.
73	DRY	O	Error corrector monitoring signal.
74	DEN	O	Error corrector monitoring signal.
75	ECCK	O	Error corrector clock. 576kHz.
76	TSTIN6	I	IC test terminal. Usually no connection.
77	TSTIN7	I	IC test terminal. Usually no connection.
78	MUT1	I	Muting input. "H" for muting.
79	VDD	-	Power supply (+5V).
80	GND	-	Ground (0V).
81	DOUT	O	QPSK inverted output.
82	DIN	I	QPSK signal input.
83	XSEL	I	X'tal select signal. "H" for using it.
84	PSEL	I	PLL select signal. "H" for using it.
85	EPCK	O	QPSK eye pattern clock. 288 kHz.
86	EYE1	O	Eye pattern output: Phase I.
87	EYEQ	O	Eye pattern output: Phase Q.
88	BTR	O	
89	ELB	O	
90	C9M	O	9.216MHz
91	TSTIN8	I	IC test terminal. Usually no connection.
92	GND	-	Ground (0V)
93	IDST	O	ID start position indication signal.
94	IDCK	O	ID signal sampling clock. Data changes at the negative-positive edge of the clock. 576kHz.
95	IDO	O	ID data output (MSB first).
96	WINGT	O	Goes "L" during search for the sync signal of the correction block.
97	SYSR0	O	Indicates the sync signal lock status of the correction block.
98	SYST1	O	Indicates the sync signal lock status of the correction block.
99	ADST0	O	Indicates the ID address continuity status of the correction block.
100	ADST1	O	Indicates the ID address continuity status of the correction block.

# QM01 : PD4606A

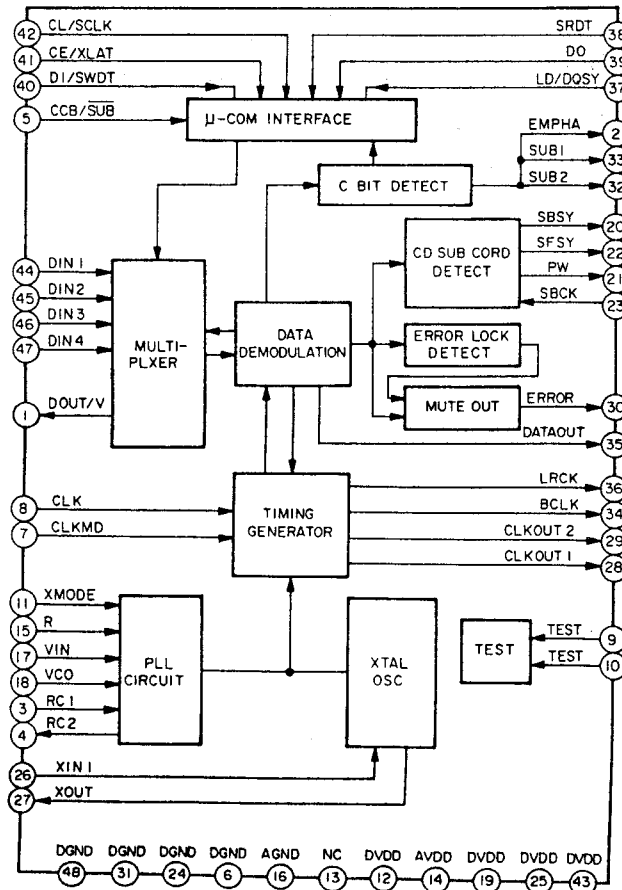


# **QL01 (CPU) TERMINAL FUNCTIONS**

PIN No.	PORT NAME	I/O	FUNCTION
1	P76	RESET	O RESET OUTPUT to ZR38500,PD4606,LC8904Q L : RESET
2	P77	A/D-SW	O INPUT AUDIO DATA SELECT SW H : DAI L : ADC
3	P00	SF-MUTE	O Soft Mute OUTPUT to DAC L : MUTE H : normal
4	P01	MUTE-F	O Front Ch MUTE OUTPUT H : MUTE L : normal
5	P02	MUTE-C	O Center Ch MUTE OUTPUT H : MUTE L : normal
6	P03	MUTE-S	O Surround Ch MUTE OUTPUT H : MUTE L : normal
7	P04	MUTE-W	O SubWoofer Ch MUTE OUTPUT H : MUTE L : normal
8	P05	STBY	O STAND BY CONTROL OUTPUT H : standby L : on
9	P06	BYPASS	O Ext. AUDIO BYPASS CONTROLL OUTPUT H : Ext L : Int.
10	P07	N.C.	N.C.
11	P10/INT0	P-DOWN	I POWER-DOWN INPUT L : POWER-DOWN H : NORMALL
12	P11/INT1	N.C.	N.C.
13	P12/INT2	RC5INPUT	I RC-5 INPUT from IR & Ext. (ACTIVE : L)
14	P13/DVO	N.C.	N.C.
15	P14/PPG	MUTE-L	O MUTE OUT for LINE OUT H : MUTE L : normal
16	P15/TC2	LED-COAX	O DIGI-COAX INPUT SEL. LED H : LED ON L : OFF
17	P16	CE2	O CHIP ENABLE OUTPUT to NJU7311M
18	P17	LED-RF	O AC-3 RF INPUT SEL. LED H : LED ON L : OFF
19	P20/STOP	PDOWN	I for BACKUP MODE L : BACKUP H : normal
20	TEST	GND	I CONNECT TO GND
21	P21/XTI	N.C.	N.C.
22	P22/XTO	N.C.	N.C.
23	RESET	RST	I CPU RESET L : RESET H : normal
24	XIN	XTIN	I 8. 0MHz CERA-LOCK
25	XOUT	XTOUT	O 8. 0MHz CERA-LOCK
26	VSS	GND	GND
27	P30	LED-DL0	O S-DELAY 0ms LED L : LED ON H : OFF
28	P31	LED-DL5	O S-DELAY 5ms LED L : LED ON H : OFF
29	P32	LED-DL10	O S-DELAY 10ms LED L : LED ON H : OFF
30	P33	LED-DL15	O S-DELAY 15ms LED L : LED ON H : OFF
31	P34	LED-MUTE	O MUTE KEY MUTE LED H : LED ON L : OFF
32	P35	LED-TEST	O TEST TONE LED L : LED ON H : OFF
33	P36	LED-OPT	O INPUT FUNC. OPT LED L : LED ON H : OFF

PIN No.	PORT NAME	I/O	FUNCTION
34	P37	LED-AC3	O INPUT FUNC. AC3 LOCK LED L : LED ON H : OFF
35	P40	CE0	O CHIP ENABLE OUTPUT to DAI(LC8904Q)
36	P41	SS	O SPI SLAVE SELECT OUTPUT to ZR38500
37	P42/SCK1	SCK	O SPI CLOCK to ZR38500, & NJU7311
38	P43/SI1	SO	I SPI DATA from ZR38500
39	P44/SO1	Si	O SPI DATA to ZR38500 & NJU7311
40	P45/SCK2	CL	O CLOCK OUTPUT TO DAI(LC8904Q)
41	P46/SI2	DO	I DATA INPUT from DAI(LC8904Q)
42	P47/SO2	Di	O DATA OUTPUT to DAI(LC8904Q)
43	P50/INT3	N.C	I
44	P51/INT4	Error	I Error INPUT from DAI(LC8904Q) H : Error L : normal
45	P52	N.C.	N.C.
46	P53	N.C.	N.C.
47	P54	N.C	N.C
48	VASS	refGND	Int. A/D ref GND
49	VAREF	ref+5.6V	Int. A/D ref Vdd
50	P60/AIN0	KEY1	I FRONT KEY INPUT (7 KEYS)
51	P61/AIN1	KEY2	I Option Keys
52	P62/AIN2	C-SPK	I CENTER SPK MODE LARGE/SMALL/NONE A/D INPUT
53	P63/AIN3	S-SPK	I SURROUND SPK MODE LARGE/SMALL/NONE A/D INPUT
54	P64/AIN4	F/SW-SPK	I FRONT,SubW SPK MODE LARGE/SMALL, ON/OFF A/D INPUT
55	P65/AIN5	MODE	I CPU MODE SELECT (option mode) H : MZ L : HK
56	P66/AIN6	N.C	N.C
57	P67/AIN7	N.C	N.C
58	VDD	+5V	I +5V with BackUp Cap
59	P70	N.C.	N.C.
60	P71	Ext/Int	I RC-5 MODE SW H : Internal L : External
61	P72	V-UP	O VOLUME-CONT. : H L L : UP DOWN STOP
62	P73	V-DOWN	O VOLUME-CONT. : L H L
63	P74	DM-MUTE	I RF-MODULATOR-MUTE H : MUTE L : normal
64	P75	KILL-X	O OSC-STOP L : STOP H : OSC

## **QR01 : LC8904Q**



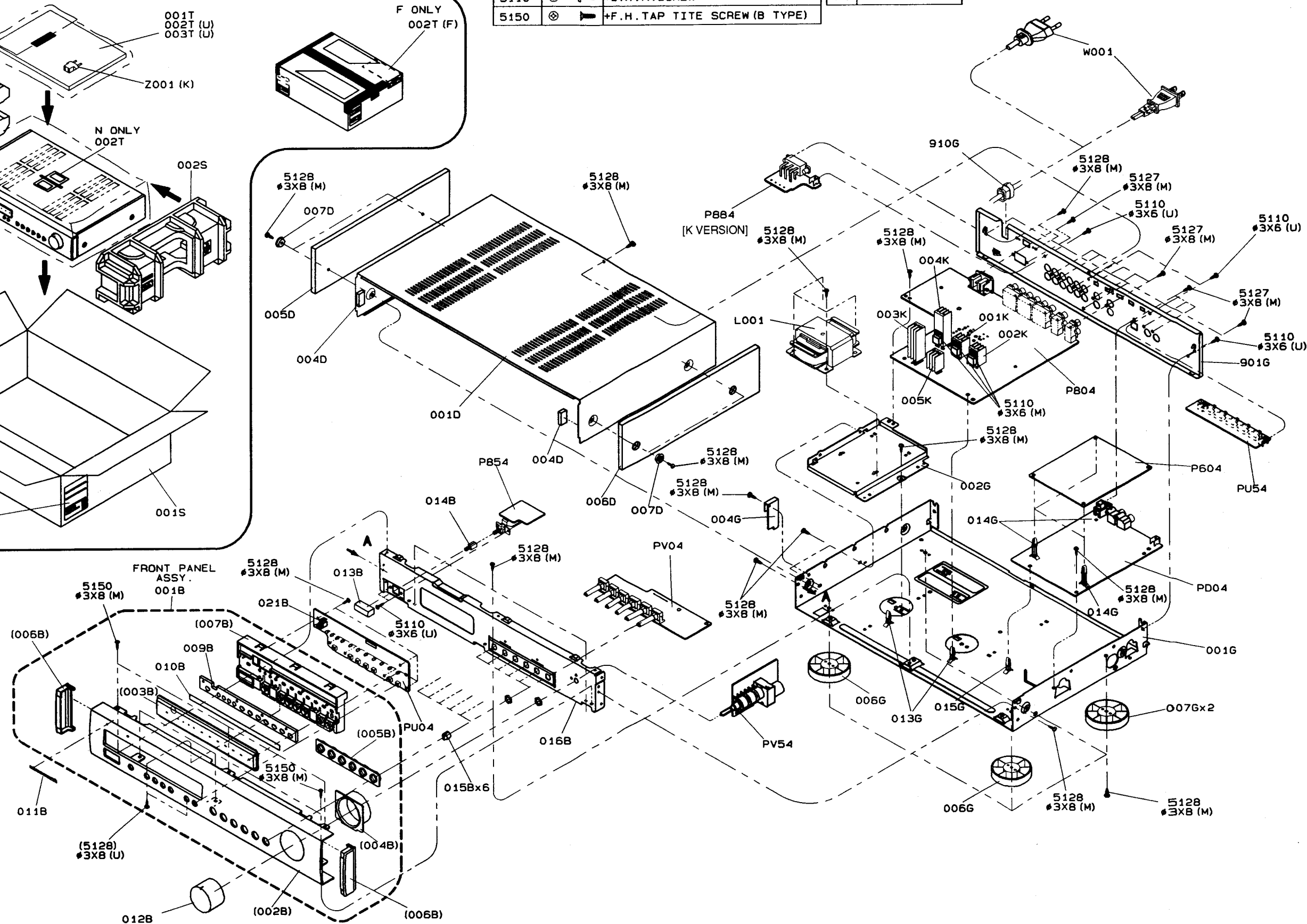
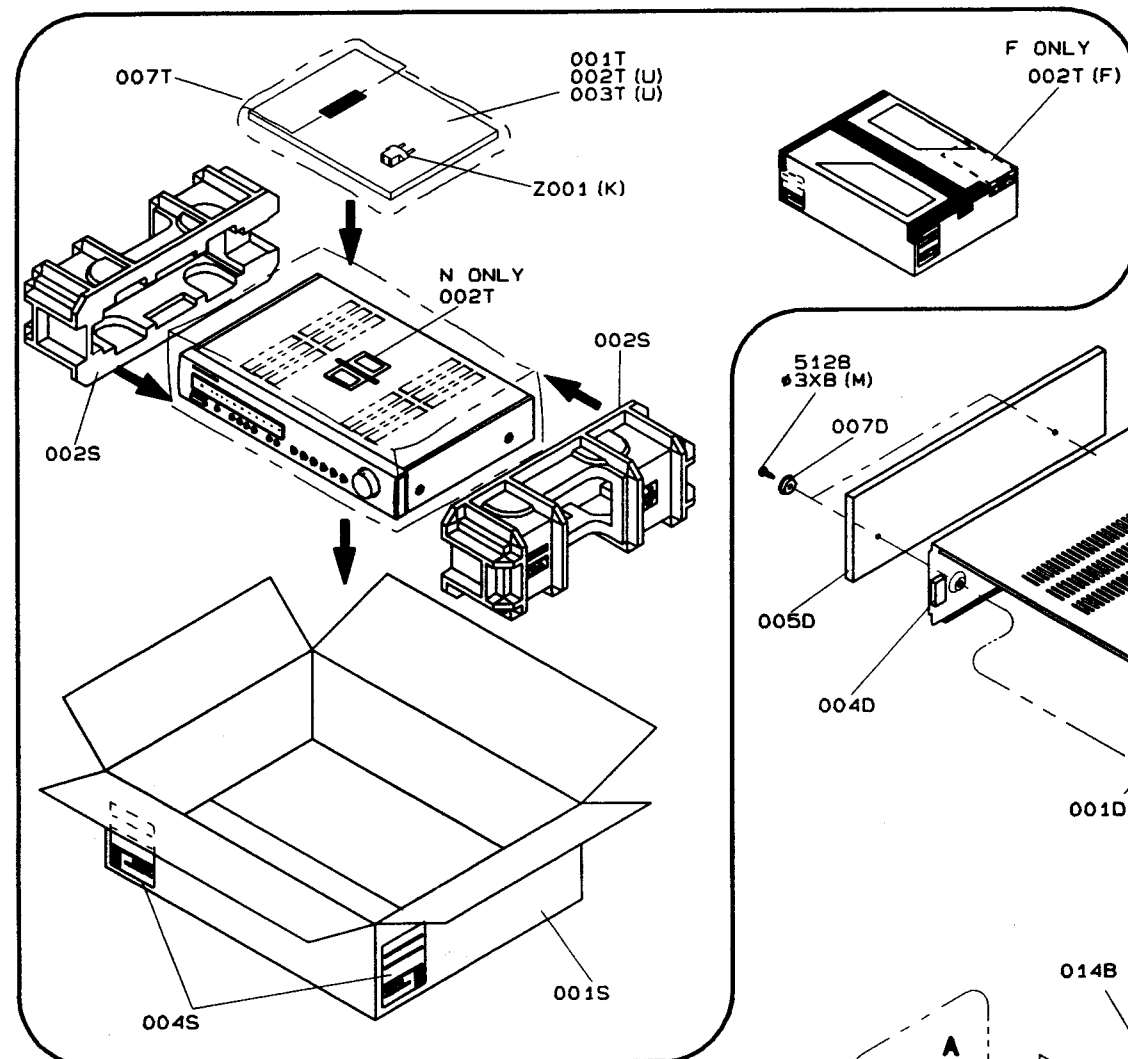
## 7. EXPLODED VIEW AND PARTS LIST

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, --:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
001B			FRONT PANEL, KIT (BLACK)	266J248500
002B		4822 459 04327	FRONT PANEL, (BLACK)	266J248010
003B		4822 450 10182	WINDOW,	266J158010
004B			BUSHING, MASTER VOLUME	266J259010
005B			BUSHING, TRIM BLACK	266J259020
006B			BUSHING, SIDE END BLACK	266J259030
009B			MASK, WINDOW	266J303010
010B			MASK, WINDOW MEJYUMU	266J303020
011B		4822 459 11172	BADGE, MZ BADGE BLACK	185J251010
012B		4822 413 41681	KNOB, MASTER BLACK	064J154080
013B		4822 410 62744	BUTTON, POWER BLACK	285K270010
014B		4822 404 21012	JOINT, POWER	025J125010
015B		4822 410 10708	KNOB, TRIM VOLUME BLACK	266J154010
016B			CHASSIS, FRONT METAL	266J105020
001D			LID, TOP COVER BLACK	198J257110
005D		4822 442 00552	SIDE PANEL, (L) BLACK	266J249010
006D		4822 442 00553	SIDE PANEL, (R) BLACK	266J249020
007D			BUSHING, SIDE PANEL	266J259050
006G		4822 462 42045	LEG, FRONT (GOLD)	183J057010
007G		4822 462 42048	LEG, REAR (GOLD)	183J057110
910G		4822 532 60948	BUSHING, AC CORD	450H259010
▲ L001	F		POWER TRANSF., FOR F	TS17205070
▲ L001	K		POWER TRANSF., FOR K	TS17205060
▲ L001	/02B		POWER TRANSF., FOR N	TS17205080
▲ L001	U		POWER TRANSF., FOR U	TS17205050
WL01			JUMPER LEAD, FFC19P P604-PU04 380MM	YU19380550
▲ W001	F		A.C POWER CORD, F OR E	YC01800800
▲ W001	/02B K		A.C POWER CORD, N	YC01800790
▲ W001	U		A.C POWER CORD, UL/CSA	YC01800780
			<b>PACKING</b>	
001S	F		PACKING CASE, BL	266J801010
002S	F		CUSHION, CUSHION(L, R)	266J809010
001T	F		USER MANUAL, DP870(F)	266J851110
001T	K		USER MANUAL, DP870(N)	266J851350
001T	/02B	4822 736 14644	USER MANUAL, DP870(N)	266J851310
001T	U		USER MANUAL, DP870(U)	266J851250
Z001	K	4822 267 31647	JACK, AC ADAPTER	YJ04001960



SYMBOL	STYLE	PARTS NAME	MARK	MATERIAL/FINISH
5128		+B.H.TAP TITE SCREW (B TYPE)	(M)	IRON/COPPER
5110		+B.H.M.SCREW	(U)	IRON/BLACK
5150		+F.H.TAP TITE SCREW (B TYPE)		



3. ELECTRICAL PARTS LIST

ASSIGNMENT OF COMMON PARTS CODES.

RESISTOR  
R\*\*\* : 1) GD05 x x x 140. Carbon film fixed resistor. ± 5% 1/4W  
R\*\*\* : 2) GD05 x x x 160. Carbon film fixed resistor. ± 5% 1/6W



① — Resistance value  
Examples :  
① Resistance value  
0.1Ω...001 10Ω...100 1kΩ...102 100kΩ...104  
0.5Ω...005 18Ω...180 2.7kΩ...272 680kΩ...684  
1Ω...010 100Ω...101 10kΩ...103 1MΩ...105  
6.8Ω...068 390Ω...391 22kΩ...223 4.7MΩ...475  
Note) Please distinguish 1/4W from 1/6W by the shape of parts used actually.

C\*\*\* : CERAMIC CAP.  
1) DD1x x x x 370. Ceramic capacitor  
Disc type  
Temp.coeff.P350~N1000.50V  
① ②  
Capacity value  
Tolerance

Examples  
① Tolerance (Capacity deviation)  
± 0.25pF...0  
± 0.5pF...1  
± 5%...5  
\* Tolerance of COMMON PARTS handled here are as follows :  
0.5pF~ 5pF...± 0.25pF  
6pF~ 10pF...± 0.5pF  
12pF~ 560pF...± 5%  
② Capacity value  
0.5pF...005 3pF...030 100pF...101  
1pF...010 10pF...100 220pF...221  
1.5pF...015 47pF...470 560pF...561

C\*\*\* : CERAMIC CAP.  
1) DK16 x x x 300. High dielectric constant ceramic capacitor  
Disc type  
Temp.chara. 2B4, 50V  
①  
Capacity value

Examples  
① Capacity value  
100pF...101 1000pF...102 10000pF...103  
470pF...471 2200pF...222

C\*\*\* : ELECTROLY CAP. ( , FILM CAP. ( )  
1) EA x x x x x 10. Electrolytic capacitor  
One-way lead type, Tolerance ± 20%  
① ②  
Working voltage  
Capacity value

Examples  
① Capacity value  
0.1μF...104 4.7μF...475 100μF...107  
0.33μF...334 10μF...106 330μF...337  
1μF...105 22μF...226 1100μF...118  
2200μF...228  
② Working voltage  
6.3V...006 25V...025  
10V...010 35V...035  
16V...016 50V...050

2) DF15 x x x 350 → Plastic film capacitor  
DF15 x x x 310 → One-way type, Mylar ± 5% 50V  
DF16 x x x 310 → Plastic film capacitor  
One-way type, Mylar ± 10% 50V  
①  
Capacity value

Examples  
① Capacity value  
0.001μF(1000pF)...102 0.1μF...104  
0.0018μF...182 0.56μF...564  
0.01μF...103 1μF...105  
0.015μF...153

NOTE : 1) The above CODES ( R\*\*\*, R\*\*\*, C\*\*\*, C\*\*\* and C\*\*\* ) are omitted on the schematic diagram in some case.  
2) On the occasion, be confirmed the common parts on the parts list.  
3) Refer to "Common Parts List" for the other common parts( R105, DD4, DK4 ).

NOTE ON SAFETY FOR FUSIBLE RESISTOR :

The suppliers and their type numbers of fusible resistors are as follows :

1. KOA Corporation  
Part No. Type No. Description  
NH05 x x x 140 → RF25S x x x x ΩJ ( ± 5 % 1 / 4 W )  
NH05 x x x 120 → RF50S x x x x ΩJ ( ± 5 % 1 / 2 W )  
NH85 x x x 110 → RF73B2A x x x x ΩJ ( ± 5 % 1 / 10 W )  
NH95 x x x 140 → RF73B2E x x x x ΩJ ( ± 5 % 1 / 4 W )

\* Resistance value Resistance value  
( 0.1 - 10 k Ω )



2. Matsushita Electronic Components Co., Ltd  
Part No. Type No. Description  
NF05 x x x 140 → ERD - 2FCJ x x x ( ± 5 % 1 / 4 W )  
RF05 x x x 140 → ERD - 2FCJ x x x ( ± 5 % 1 / 4 W )  
NF02 x x x 140 → ERD - 2FCG x x x ( ± 2 % 1 / 4 W )  
RF02 x x x 140 → ERD - 2FCG x x x ( ± 2 % 1 / 4 W )

\* Resistance value \* Resistance value


Examples :  
\* Resistance value  
0.1Ω...001 10Ω...100 1kΩ...102 100kΩ...104  
0.5Ω...005 18Ω...180 2.7kΩ...272 680kΩ...684  
1Ω...010 100Ω...101 10kΩ...103 1MΩ...105  
6.8Ω...068 390Ω...391 22kΩ...223 4.7MΩ...475

ABBREVIATION AND MARKS					
1	ANT.	: ANTENNA	2	BATT.	: BATTERY
3	CAP.	: CAPACITOR	4	CER.	: CERAMIC
5	CONN.	: CONNECTING	6	DIG.	: DIGITAL
7	HP	: HEADPHONE	8	MIC.	: MICROPHONE
9	μ-PRO	: MICROPROCESSOR	10	REC.	: RECORDING
11	RES.	: RESISTOR	12	SPK	: SPEAKER
13	SW	: SWITCH	14	TRANSF.	: TRANSFORMER
15	TRIM.	: TRIMMING	16	TRS.	: TRANSISTOR
17	VAR.	: VARIABLE	18	X'TAL	: CRYSTAL
19			20		
21			22		
23			24		
25			26		
27			28		
29			30		

NOTE ON SAFETY :

Symbol  Fire or electrical shock hazard. Only original parts should be used to replaced any part marked with symbol . Any other component substitution ( other than original type ), may increase risk of fire or electrical shock hazard.

安全上の注意 :

がついている部品は、安全上重要な部品です。必ず指定されている部品番号の部品を使用して下さい。

SM950509K1

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CL01		4822 124 10772	P604-AC-3 DECODER CIRCUIT BOARD	
CL02		4822 124 90406	P604-CAPACITORS	
CL03		4822 126 11687	ELECT.CHIP, 100 μF 6.3V	EY10700620
CL04		4822 124 11074	BIG ELECT., FMOH223ZTP16	EX22300530
CL05		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CL06		4822 126 11687	ELECT.CHIP, 10 μF 16V	EY10601620
CL07		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CL08		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CL12		4822 122 33744	CER.CHIP, 100 PF ±5% 50V	DD95101300
CM01		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM02		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM03		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM04		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM05		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM06		4822 122 33753	CER.CHIP, 150 PF ±5% 50V	DD95151300
CM07			CER.CHIP, 0.01 μF ±10% 50V	DK96103300
CM08		4822 126 11687	CER.CHIP, 0.01 μF ±10% 50V	DK96103300
CM09		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM10		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM11		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM12		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM13		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM14		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM15		4822 126 11687	FILM, 0.47 μF ±5% 50V	DF15474350
CM16		4822 122 33753	CER.CHIP, 150 PF ±5% 50V	DD95151300
CM17			FILM, 0.47 μF ±5% 50V	DF15474350
CM33		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM34		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM35		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM36		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM37		4822 126 13837	CER.CHIP, 0.1 μF ±10% 10V	DK96104200
CM38			CER.CHIP, 0.01 μF ±10% 50V	DK96103300
CM39			CER.CHIP, 0.01 μF ±10% 50V	DK96103300
CM40		4822 122 33761	CER.CHIP, 22PF ±5% 50V	DD95220300
CM41		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM42		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM51		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM52		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM53		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM54		4822 122 33744	CER.CHIP, 100 PF ±5% 50V	DD95101300
CM55		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM56		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM57		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM58		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CM59		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM60		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM61		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CM62		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CR01		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CR02		5322 126 11578	CER.CHIP, 1000P ±10% 50V	DK96102300
CR03		4822 122 33744	CER.CHIP, 100PF ±5% 50V	DD95101300
CR04		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CR05		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CR06		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CR07			CER.CHIP, 0.01 μF ±10% 50V	DK96103300
CR08		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CR09		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CR10		4822 122 33761	CER.CHIP, 22 PF ±5% 50V	DD95220300

(VERS. :VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CR11		4822 122 33761	CER.CHIP, 22 PF ±5% 50V	DD95220300
CR12		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
CR13		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CR14		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
CR15		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C601		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C602				
I		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C605				
C606		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C607				
I		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C612				
C613		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C614				
I		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C618				
C619		4822 122 33744	CER.CHIP, 100 PF ±5% 50V	DD95101300
C620		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C621				
I		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C625				
C626		4822 126 11671	CER.CHIP, 33PF ±5%	DD95330300
C627		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C628		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C629		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C630		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C631		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C632		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C634		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C681				
I		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C686		4822 126 11687		
C687		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C688		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C689		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C690		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C691		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C692		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C693		4822 124 10772	ELECT.CHIP, 100 μF 6.3V	EY10700620
C694		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C695		4822 126 11687	CER.CHIP, 0.1 μF +80%-20%	DK98104200
C696		4822 126 11687	CER.CHIP, 0.1 μF 16V	DK98104200
C697		4822 126 11671	CER.CHIP, 33PF ±5%	DD95330300
RR02		4822 126 13837	CER.CHIP, 0.1 μF ±10% 10V	DK96104200
C***			P604-CAPACITORS (COMMON) PLASTIC FILM CAP., ±5% 50V:CM15, CM16  P604-RESISTORS (ALL CHIP)	
RL01				
I		4822 051 30222	2.2KΩ ±5% 1/16W	NN05222610
RL06				
RL08		4822 116 82487	0Ω 1/16W	NN05000610
RL09		4822 051 30472	4.7KΩ ±5% 1/16W	NN05472610
RL10		4822 051 30472	4.7KΩ ±5% 1/16W	NN05472610
RL11		4822 051 30473	47KΩ ±5% 1/16W	NN05473610
RL12		4822 116 82487	0Ω 1/16W	NN05000610
RL13		4822 116 82487	0Ω 1/16W	NN05000610

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POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RL14   RL19 RL20 RL21 RL22 RL23 RL24 RL25 RL26 RL32 RL51   RL58		4822 051 30472	4.7K $\Omega$ $\pm$ 5% 1/16W	NN05472610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
RM01 RM02 RM03 RM04 RM05 RM06 RM07 RM08 RM09 RM10 RM11 RM12 RM13 RM14 RM15 RM16 RM17 RM19 RM20 RM21 RM22 RM23 RM27 RM28 RM29 RM31 RM32 RM33 RM34 RM35   RM38 RM39 RM40 RM41 RM42 RM43 RM44 RM45 RM46 RM54   RM59 RM60 RM61 RM75   RM78		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30472	4.7K $\Omega$ $\pm$ 5% 1/16W	NN05472610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30151	150 $\Omega$ $\pm$ 5% 1/16W	NN05151610
		4822 051 30222	2.2K $\Omega$ $\pm$ 5% 1/16W	NN05222610
		4822 051 30331	330 $\Omega$ $\pm$ 5% 1/16W	NN05331610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30102	1K $\Omega$ $\pm$ 5% 1/16W	NN05102610
		4822 051 30101	100 $\Omega$ $\pm$ 5% 1/16W	NN05101610
		4822 116 82487	0 $\Omega$ $\pm$ 5% 1/16W	NN05000610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30224	220K $\Omega$ $\pm$ 5% 1/16W	NN05224610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30224	220K $\Omega$ $\pm$ 5% 1/16W	NN05224610
		4822 051 30683	68K $\Omega$ $\pm$ 5% 1/16W	NN05683610
		4822 051 30153	15K $\Omega$ $\pm$ 5% 1/16W	NN05153610
		4822 051 30153	15K $\Omega$ $\pm$ 5% 1/16W	NN05153610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30223	22K $\Omega$ $\pm$ 5% 1/16W	NN05223610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 116 83206	120 $\Omega$ $\pm$ 5% 1/16W	NN05121610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 051 30332	3.3K $\Omega$ $\pm$ 5% 1/16W	NN05332610
		4822 051 30332	3.3K $\Omega$ $\pm$ 5% 1/16W	NN05332610
		4822 051 30103	10K $\Omega$ $\pm$ 5% 1/16W	NN05103610
		4822 051 30104	100K $\Omega$ $\pm$ 5% 1/16W	NN05104610
		4822 051 30224	220K $\Omega$ $\pm$ 5% 1/16W	NN05224610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610

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POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RR01		4822 051 30759	75 $\Omega$ $\pm$ 5% 1/16W	NN05750610
RR02		4822 126 13837	CER., 0.1 $\mu$ F $\pm$ 10% 10V	DK96104200
RR03		4822 051 30759	75 $\Omega$ $\pm$ 5% 1/16W	NN05750610
RR04		4822 116 83216	56K $\Omega$ $\pm$ 5% 1/16W	NN05563610
RR05		4822 051 30334	330K $\Omega$ $\pm$ 5% 1/16W	NN05334610
RR06		4822 051 30333	33K $\Omega$ $\pm$ 5% 1/16W	NN05333610
RR08		4822 051 30479	47 $\Omega$ $\pm$ 5% 1/16W	NN05470610
RR09		4822 116 83208	12K $\Omega$ $\pm$ 5% 1/16W	NN05123610
RR10		4822 116 83208	12K $\Omega$ $\pm$ 5% 1/16W	NN05123610
RR11		4822 116 83215	5.6K $\Omega$ $\pm$ 5% 1/16W	NN05562610
RR12		4822 116 83215	5.6K $\Omega$ $\pm$ 5% 1/16W	NN05562610
RR13		4822 116 83206	120 $\Omega$ $\pm$ 5% 1/16W	NN05121610
RR14		4822 051 30224	220K $\Omega$ $\pm$ 5% 1/16W	NN05224610
RR15   RR23 RR25 RR29		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
		4822 116 83216	56K $\Omega$ $\pm$ 5% 1/16W	NN05563610
R601   R620 R621 R622   R638 R639 R640   R646 R647 R648 R651   R658		4822 051 30479	47 $\Omega$ $\pm$ 5% 1/16W	NN05470610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
		4822 051 30479	47 $\Omega$ $\pm$ 5% 1/16W	NN05470610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 051 30479	47 $\Omega$ $\pm$ 5% 1/16W	NN05470610
		4822 051 30473	47K $\Omega$ $\pm$ 5% 1/16W	NN05473610
		4822 051 30105	1M $\Omega$ $\pm$ 5% 1/16W	NN05105610
		4822 116 82487	0 $\Omega$ 1/16W	NN05000610
LL01   LL09		4822 051 30101	100 $\Omega$ $\pm$ 5% 1/16W	NN05101610
			<b>P604-SEMICONDUCTORS</b>	
DL01		4822 130 83715	CHIP DIODE, 1SS301, DAN202U	HZ21005000
DM01 QL01		4822 130 10683	CHIP DIODE, KV1851-TL00 MICROPROCESSOR, TMP87PH40AF	HZ40003420 HU266JT02F
QL02		4822 209 14872	IC, 74HC541(SOP)	HC754100R0
QL03		4822 130 60856	DIG.TRS., DTC144EC	BA20021210
QL04		4822 130 60856	DIG.TRS., DTC144EC	BA20021210
QL05		4822 130 60856	DIG.TRS., DTC144EC	BA20021210
QL06		4822 209 30426	IC, CMOS 74HC00 FLAT	HC700000Z0
QL07		4822 209 31929	IC, OR-GATE 74HC32	HC703200Z0
QL08		4822 130 60856	DIG.TRS., DTC144EC	BA20021210
QL09			CHIP TR., 2SC4081 (Q, R) 2SC4116 (Y, GR)	HX300012A0
QM01 QM02		4822 209 14884	IC, PD4606A AC-3 RF DEMO. IC, MCM6205DJ	HC10015660 HC10081000
QM03 QM04		4822 209 14876	9X32K SRAM <35NS IC, MC14577BF(SOP) CHIP TR., 2SC4081 (Q, R) 2SC4116 (Y, GR)	HC10065170 HX300012A0

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POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
QM05		4822 130 10698	CHIP TR., 2SA1586 (Y, GR)	HX100012A0
QM06		4822 209 14877	2SA1576A (Q, R)	HC10180090
QM07		4822 209 83357	IC, NJM360M(SOP)	HC10029090
QM08		4822 209 32442	IC, NJM4560M	HC000305K0
QM09		4822 130 61199	IC, TC7WU04F	BA10014210
QM10		4822 209 83357	DIG.TRS., DTA144EU	HC10029090
QM11		4822 209 32442	IC, NJM4560M	HC000305K0
QR01		4822 209 14863	IC, LC8904Q DIGI. AUDIO I/F	HC10372030
QR02		4822 209 63379	IC, 74HC08 FLAT	HC700800Z0
QR03		5322 209 73187	IC, 74HC04 FLAT	HC700400R0
Q601		4822 209 14882	IC, ZR38500-VER.3	HC10020990
			AC-3 DECODER	
Q602				
I		4822 209 14864	IC, M628032-20EI	HC10076000
Q604			8X32K SRAM <35NS (SOJ)	
			<b>P604-MISCELLANEOUS</b>	
J601			JACK, TKC-G12X-E1	YJ06031000
J602			JACK, TKC-G12X-E1	YJ06031000
J603			JACK, TKC-G12X-E1	YJ06031000
J604			JACK, 53261-1510 1.25MM	YJ07006850
J605			JACK, 006200-197-032800	YJ07006400
J606			JACK, 53261-0610 1.25MM	YJ07006760
LL01				
I		4822 051 30101	CHIP, 100Q $\pm 5\%$ 1/16W	NN05101610
LL09				
LL10		4822 157 10884	EMI FILTER, BLM11A221S	FN31000010
LM01			EMI FILTER, NFM41P11C204	FM31204010
LM02		4822 242 10582	L.C. FILTER, SBP-4930	FF30288010
			2.88MHZ-BPF	
LM03			CHIP INDUCTANCE, 68 $\mu$ H	LU12683010
LR01			EMI FILTER, NFM41P11C204	FM31204010
L601			EMI FILTER, NFM41P11C204	FM31204010
L603			EMI FILTER, NFM41P11C204	FM31204010
L681				
I		4822 157 70322	EMI FILTER, NFM61R10T102	FM32102010
L685				
XL01		4822 242 80349	CER. VIB., 8.0MHZ (EFO V)	FQ08004030
XM01		4822 242 10576	X'TAL, FXO-31FX 46.08MHZ-OSC	JX46001380
XM02		4822 242 10577	X'TAL, CX-5F 18.432MHZ-	JX18001380
XR01		4822 242 10578	X'TAL, CX-5F(24.5760MHZ)	JX24001380
X601		4822 242 10579	CER.VIB., EFOJ3385E5	FQ03385020
			33.868MHZ	
			<b>P804-POWER CIRCUIT BOARD</b>	
			<b>P804-CAPACITORS</b>	
CL91		4822 122 40617	CER., 0.1 $\mu$ F +80%-20%	DD38104010
CL92		4822 122 40617	CER., 0.1 $\mu$ F +80%-20%	DD38104010
C751				
I		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
C756				
C761		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C762		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C781				
I	/02B	4822 126 10408	CER., 220PF $\pm 10\%$	DA16221110
C788				
▲ C801		4822 122 33276	CER., 0.01 $\mu$ F $\pm 20\%$	DK17103840
▲ C802		4822 122 33276	CER., 0.01 $\mu$ F $\pm 20\%$	DK17103840

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POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
C804				
I		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C807				
C808		4822 124 22695	ELECT., 2200 $\mu$ F M 35VRA-2	OA22803520
C809		4822 124 22695	ELECT., 2200 $\mu$ F M 35VRA-2	OA22803520
C810		4822 124 22243	ELECT., 6800 $\mu$ F 16VRA2	OA68801620
C811		4822 124 90388	ELECT., 3300 $\mu$ F 16V RA2	OA33801620
C814		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C818		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C819		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C820		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C823		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C824		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C831				
I		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C837				
C838		4822 126 10364	CER., 100PF $\pm 10\%$	DA16101110
C840		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C841		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C842		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C844			FILM, 0.22 $\mu$ F $\pm 5\%$ 50V	
C851		4822 124 23054	ELECT., 0.47 $\mu$ F 50V	EJ47405010
C852		4822 124 23053	ELECT., 1 $\mu$ F 50V	EJ10505010
C854		4822 122 30043	CER., 0.01 $\mu$ F +80%-20%	DK18103310
C871		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C873		4822 122 40588	CER., 0.022 $\mu$ F $\pm 20\%$	DA17223110
C874		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
			<b>P804-CAPACITORS(COMMON)</b>	
			ELECTROLYTIC CAP.	
			ONE-WAY LEAD TYPE,	
			TOLERANCE $\pm 20\%$	
			C803, C812, C813, C815-C817,	
			C821, C822, C825- C830, C839,	
			C843, C844, C853, C872	
			<b>P804-RESISTORS</b>	
R761		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
R801		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
R805		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
R809		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
R810		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
R812		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
R871		4822 052 10109	10 $\Omega$ $\pm 5\%$ 1/6W	GG05100160
			<b>P804-RESISTORS(COMMON)</b>	
			CARBON FILM FIXED RES.,	
			$\pm 5\%$ 1/6W:	
			R701-R726, R731-R736, R741-	
			R748, R751-R756, R807, R808	
			R813-R815, R851-R861, R872-	
			R877, RL91	
			<b>P804-SEMICONDUCTORS</b>	
D701				
I		4822 130 32362	DIODE, 1SS176, A165, 1SS254	HD20002000
D704			30V 0.1A	
▲ D801		4822 130 33057	DIODE, S2VB20	HE20011290
▲ D802		4822 130 31007	DIODE, S4VB-20	HE20015290
▲ D803		4822 130 32968	DIODE, RL203-M11 2A-200V	HD20001710
▲ D804		4822 130 32968	DIODE, RL203-M11 2A-200V	HD20001710
▲ D807				
I		4822 130 82421	DIODE, 1D31A/200V	HD20002710
▲ D810				

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D811 I		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D815		4822 130 32968	DIODE, RL203-M11 2A-200V	HD20001710
D816		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D817		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D818		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D820		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D822		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D836		4822 130 32362	DIODE, 1SS176, MA165, 1SS254 30V 0.1A	HD20002000
D851		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D853		4822 130 82421	DIODE, 1D3 1A/200V	HD20002710
D855		4822 130 80316	ZENER DIODE, NTJ3.6A 3.6V	HD30361000
D856		4822 130 32362	DIODE, 1SS176, MA165, 1SS254 30V 0.1A	HD20002000
D871		4822 130 80317	ZENER DIODE, 5.1V MTJ5.1B RD5.1ES-B2 04AZ5.1Y	HD30511000
Q701 I		4822 130 42594	DIG.TRS., DTC144ES/UN4213 47K, 47K	BA20002000
Q705				
Q706 I		4822 130 61227	DIG.TRS., DTA114ES/UN4111 10K, 10K	BA10001000
Q710				
Q711 I		4822 130 43818	TRS., 2SC2878 A/B	HT328782A0
Q718				
Q801		4822 209 31629	IC, NJM78M15FA(0.5A 15V)	HC38515090
Q802		4822 209 61526	IC, NJM79M15FA(0.5A -15V)	HC39515090
Q803		4822 209 31631	IC, NJM7805FA +5V	HC38905090
Q804		4822 209 30063	IC, NJM79M05AF -5V 0.5A	HC39505090
Q805		4822 209 31631	IC, NJM7805FA +5V	HC38905090
Q806		4822 209 71373	IC, NJM78L05A	HC38105090
Q807		4822 209 14883	IC, S-806C V-SENSOR 4.55V	HC10075530
Q808		4822 130 62335	TRS., 2SD2033(E) 120V 1.8W	HT420331E0
Q851		4822 130 42298	TRS., (2SC) C536SP, C2458, C3311, C1740S	HT30001000
Q852		4822 130 42298	TRS., (2SC) C536SP, C2458, C3311, C1740S	HT30001000
Q853		4822 130 61227	DIG.TRS., DTA114ES/UN4111 10K, 10K	BA10001000
Q854		4822 130 62335	TRS., 2SD2033(E) 120V 1.8W	HT420331E0
Q855		4822 130 62335	TRS., 2SD2033(E) 120V 1.8W	HT420331E0
Q856		4822 130 61227	DIG.TRS., DTA114ES/UN4111 10K, 10K	BA10001000
Q857		4822 130 61227	DIG.TRS., DTA114ES/UN4111 10K, 10K	BA10001000
Q871		4822 209 30193	IC, LB1641 MOTOR DRIVER	HC10279030
▲ F801	F U		<b>P804-MISCELLANEOUS</b> FUSE, 500MA 250V UL, CSA, MITI	FS10050350
▲ F801	/02B		FUSE, 160 MA 250V BS LISTED	FS10016850
▲ F802	F U		FUSE, T400MA 250V	FS20040210
▲ F802	K/02B		FUSE, T160MA 250V	FS20016200
J701		4822 265 31045	TERMINAL, 2P RCA W/R/GL	YT02021080
J702			TERMINAL, 6P RCA BLK-AU	YT02060550
J703			TERMINAL, 6P RCA BLK-AU	YT02060550
J704		4822 267 41009	TERMINAL, 2P RCA (RC5) OR	YT02020890
▲ J802	F	4822 267 31686	JACK, AC OUTLET 1P	YJ04001780
▲ J802	U	4822 267 31686	JACK, AC OUTLET 1P	YJ04001780

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POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJ)
L701 I		4822 280 20501	RELAY, MR62-24SR 24V	LY20240410
L704				
▲ L801		4822 157 70419	FILTER, LF-4D-102	FN01020020
▲ L802		4822 280 70354	RELAY, VB 24MBU-510 5A/240VAC	LY20240310
▲ L803		4822 280 70354	RELAY, VB 24MBU-510 5A/240VAC	LY20240310
L891 I		4822 242 73843	EMI FILTER, DSS306-91-F-1223Z	FM12223010
L897				
▲ C891		4822 122 33276	<b>P854-POWER SW CIRCUIT BOARD</b> <b>P854-CAPACITORS</b> CER., 0.01 $\mu$ F $\pm$ 20%	DK17103840
▲ S891		4822 276 11654	<b>P854-MISCELLANEOUS</b> PUSH SW., POWER SW. 1.5MM TV-5	SP01010960
▲ F881 K			<b>P884-VOLTAGE SELECT CIRCUIT BOARD</b> <b>P884-MISCELLANEOUS</b> FUSE, 160 MA 250V BS	FS10016850
▲ F882 K		4822 253 30394	FUSE, 315 MA 250V BS	FS10031850
▲ S881 K		4822 277 21825	SLIDE SW., SDKGA4 SEMKO	SS02021510
CD01		4822 126 10935	<b>PD04-DAC, CROSS-OVER CIRCUIT BOARD</b> <b>PD04-CAPACITORS</b> ELECT., 100 $\mu$ F 6.3V	EJ10700610
CD02 I		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD05		4822 124 23056	ELECT., 47 $\mu$ F 10V	EJ47601010
CD06		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CD10		4822 124 11074	ELECT., 10 $\mu$ F 16V	EY10601620
CD11		4822 124 11074	ELECT., 10 $\mu$ F 16V	EY10601620
CD12		4822 122 33752	CER., 15PF $\pm$ 5% 50V	DD95150300
CD13		4822 122 33752	CER., 15PF $\pm$ 5% 50V	DD95150300
CD14				
CD19 I		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD22		4822 122 33752	CER., 15 PF $\pm$ 5% 50V	DD95150300
CD23		4822 122 33752	CER., 15 PF $\pm$ 5% 50V	DD95150300
CD24				
CD25		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
I, CD28		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD29		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD30		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CD31		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD32		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
I CD35		4822 124 23056	ELECT., 47 $\mu$ F 10V	EJ47601010
CD36		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CD40		4822 124 11074	ELECT., 10 $\mu$ F 16V	EY10601620
CD41		4822 124 11074	ELECT., 10 $\mu$ F 16V	EY10601620
CD42		4822 122 33752	CER., 15PF $\pm$ 5% 50V	DD95150300
CD43		4822 122 33752	CER., 15PF $\pm$ 5% 50V	DD95150300
CD44				
CD49 I		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD52				

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CD53 		4822 126 11724	CER., 560PF $\pm 10\%$	DK96561300
CD56				
CD61		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CD62 		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD65				
CD66		4822 124 23056	ELECT., 47 $\mu$ F 10V	EJ47601010
CD69		4822 126 11724	CER., 560PF $\pm 10\%$	DK96561300
CD70		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CD71		4822 124 11074	ELECT., 10 $\mu$ F 16V	EY10601620
CD72		4822 124 11074	ELECT., 10 $\mu$ F 16V	EY10601620
CD73		4822 122 33752	CER., 15PF $\pm 5\%$ 50V	DD95150300
CD74		4822 126 11724	CER., 560PF $\pm 10\%$	DK96561300
CD79 		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CD82				
CD91		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE01		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE03		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE04		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE05		4822 126 11687	CER., 0.1U +80-20%	DK98104200
CE06		4822 126 11687	CER., 0.1U +80-20%	DK98104200
CE07		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE08		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE13		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE14		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE15 		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE18				
CE19		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE20		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE21		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE22		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE23		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE24		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE25		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE26		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE31		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE33		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE34		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE35		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE36		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE37		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE38		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE43		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE44		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE45 		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE48				
CE49		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE50		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE51		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE52		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE53		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE54		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE55		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE56		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE60		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE63		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE64		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
CE69		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE70		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE71		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE72		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE73		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE74		4822 122 33752	CER., 15P $\pm 5\%$ 50V	DD95150300
CE75		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE76		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE77		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE82		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE83		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE84		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE85		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE86		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CE87		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE88		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CE89		4822 124 21894	ELECT., 10 $\mu$ F 16V	EJ10601610
CM91		4822 126 11567	CER., 0.022 $\mu$ F $\pm 10\%$	DK96223200
CM92		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CM93		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CM94		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CM95		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CM96		5322 126 11578	CER., 1000 PF $\pm 10\%$	DK96102300
CM97		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
CM98		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CR93		4822 126 11687	CER., 0.1 $\mu$ F +80%-20%	DK98104200
CR94		4822 126 10935	ELECT., 100 $\mu$ F 6.3V	EJ10700610
—				
C***			<b>PD04-CAPACITORS (COMMON)</b> PLASTIC FILM CAP., $\pm 5\%$ 50V: CD07-, CD08, CD15-CD18, CD37, CD38, CD45-CD48, CD67, CD68, CD75-CD78, CE09-CE12 CE39-CE42, CE67, CE68, CE78-CE81, CE95, CE96	
RD03 		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD06				
RD09 		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD14				
RD15		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD16		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD19		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RD20		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RD21 		4822 051 30153	CHIP, 15K $\Omega$ $\pm 5\%$ 1/16W	NN05153610
RD24				
RD25		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RD26		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RD27		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RD28		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RD29		4822 051 30101	CHIP, 100 $\Omega$ $\pm 5\%$ 1/16W	NN05101610
RD33 		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD36				

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RD39		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD40		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD41				
I		4822 051 30222	CHIP, 2.2K $\Omega$ $\pm 5\%$ 1/16W	NN05222610
RD44				
RD45		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD46		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD63		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD64		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD65		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RD66		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RD69		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD70		4822 051 30472	CHIP, 8.2K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD71				
I		4822 051 30222	CHIP, 2.2K $\Omega$ $\pm 5\%$ 1/16W	NN05222610
RD74				
RD75		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD76		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RD78		4822 116 83221	CHIP, 8.2K $\Omega$ $\pm 5\%$ 1/16W	NN05822610
RD80		4822 117 10158	1 $\Omega$ $\pm 5\%$ 1/4W	GG05010140
RD81		4822 051 30472	CHIP, 4.7K $\Omega$ $\pm 5\%$ 1/16W	NN05472610
RE01		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE02		4822 051 30101	CHIP, 100 $\Omega$ $\pm 5\%$ 1/16W	NN05101610
RE03		4822 051 30101	CHIP, 100 $\Omega$ $\pm 5\%$ 1/16W	NN05101610
RE04		4822 051 30101	CHIP, 100 $\Omega$ $\pm 5\%$ 1/16W	NN05101610
RE07				
I		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RE10				
RE11		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE12		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE13		4822 051 30102	CHIP, 1K $\Omega$ $\pm 5\%$ 1/16W	NN05102610
RE14		4822 051 30102	CHIP, 1K $\Omega$ $\pm 5\%$ 1/16W	NN05102610
RE15		4822 051 30223	CHIP, 22K $\Omega$ $\pm 5\%$ 1/16W	NN05223610
RE16		4822 051 30223	CHIP, 22K $\Omega$ $\pm 5\%$ 1/16W	NN05223610
RE17				
I		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE20				
RE21		4822 051 30153	CHIP, 15K $\Omega$ $\pm 5\%$ 1/16W	NN05153610
RE22		4822 051 30153	CHIP, 15K $\Omega$ $\pm 5\%$ 1/16W	NN05153610
RE23		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE24		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE25				
RE26		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
I				
RE35				
I		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RE38				
RE39		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE40		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE41		4822 051 30102	CHIP, 1K $\Omega$ $\pm 5\%$ 1/16W	NN05102610
RE42		4822 051 30102	CHIP, 1K $\Omega$ $\pm 5\%$ 1/16W	NN05102610
RE43		4822 051 30223	CHIP, 22K $\Omega$ $\pm 5\%$ 1/16W	NN05223610
RE44		4822 051 30223	CHIP, 22K $\Omega$ $\pm 5\%$ 1/16W	NN05223610
RE45				
I		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE50				
RE51				
I		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE56				
RE61		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE62		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE65		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
RE66		4822 051 30473	CHIP, 47K $\Omega$ $\pm 5\%$ 1/16W	NN05473610
RE67		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE68		4822 051 30102	CHIP, 1K $\Omega$ $\pm 5\%$ 1/16W	NN05102610
RE69		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE70		4822 051 30223	CHIP, 22K $\Omega$ $\pm 5\%$ 1/16W	NN05223610
RE71				
I		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE80				
RE81		4822 051 30392	CHIP, 3.9K $\Omega$ $\pm 5\%$ 1/16W	NN05392610
RE82		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE83				
I		4822 051 30153	CHIP, 15K $\Omega$ $\pm 5\%$ 1/16W	NN05153610
RE86				
RE87		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE90		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RE91		4822 116 83212	CHIP, 18K $\Omega$ $\pm 5\%$ 1/16W	NN05183610
RE92		4822 116 83212	CHIP, 18K $\Omega$ $\pm 5\%$ 1/16W	NN05183610
RE93		4822 051 30104	CHIP, 100K $\Omega$ $\pm 5\%$ 1/16W	NN05104610
RE94		4822 051 30333	CHIP, 33K $\Omega$ $\pm 5\%$ 1/16W	NN05333610
RE95		4822 051 30224	CHIP, 220K $\Omega$ $\pm 5\%$ 1/16W	NN05224610
RE96		4822 051 30333	CHIP, 33K $\Omega$ $\pm 5\%$ 1/16W	NN05333610
RE97		4822 051 30273	CHIP, 27K $\Omega$ $\pm 5\%$ 1/16W	NN05273610
RM91		4822 051 30154	CHIP, 150K $\Omega$ $\pm 5\%$ 1/16W	NN05154610
RM92		4822 051 30561	CHIP, 560 $\Omega$ $\pm 5\%$ 1/16W	NN05561610
RM93		4822 051 30829	CHIP, 82 $\Omega$ $\pm 5\%$ 1/16W	NN05820610
RM94		4822 051 30102	CHIP, 1K $\Omega$ $\pm 5\%$ 1/16W	NN05102610
RM96		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RM97		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RM98		4822 051 30103	CHIP, 10K $\Omega$ $\pm 5\%$ 1/16W	NN05103610
RR91		4822 051 30759	CHIP, 75 $\Omega$ $\pm 5\%$ 1/16W	NN05750610
RR99		4822 116 82487	CHIP, 0 $\Omega$ 1/16W	NN05000610
LM91		4822 116 82487	CHIP, 0 $\Omega$ 1/16W	NN05000610
LR91		4822 116 82487	CHIP, 0 $\Omega$ 1/16W	NN05000610
<b>PD04-SEMICONDUCTORS</b>				
QD01		4822 209 33812	IC, TDA1305T DAC	HC10122490
QD02		4822 209 33812	IC, TDA1305T DAC	HC10122490
QD03		4822 209 33812	IC, TDA1305T DAC	HC10122490
QD05		4822 209 83357	IC, NJM4560M	HC10029090
QD06		4822 209 83357	IC, NJM4560M	HC10029090
QD07		4822 209 83357	IC, NJM4560M	HC10029090
QD09		4822 209 83357	IC, NJM4560M	HC10029090
QD10		4822 209 83357	IC, NJM4560M	HC10029090
QD11		4822 209 83357	IC, NJM4560M	HC10029090
QD13		4822 209 71451	IC, NJM4558M FLAT	HC10011090
QD14		4822 209 32442	IC, TC7WU04F	HC000305K0
QE04		4822 209 14869	IC, NJU7311AM ANA. SW	HC10151090
QE05				
I		4822 209 71451	IC, NJM4558M FLAT	HC10011090
QE14				
QM91			CHIP TR., 2SC4081 (Q, R) 2SC4116 (Y, GR)	HX300012A0
QM92		4822 209 71451	IC, NJM4558M FLAT	HC10011090
<b>PD04-MISCELLANEOUS</b>				
JD01			PLUG, TKC-G12P-B1	YP06020940
JD02			PLUG, TKC-G12P-B1	YP06020940
JD03			PLUG, TKC-G12P-B1	YP06020940
JR01			TERMINAL, 1P YKC21-3707	YT02011030
JR02			TERMINAL, 1P YKC21-3707	YT02011030
JR03		4822 218 11487	OPT. CONNECTOR, GP1F32R	YJ15000150



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POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
LD01 I LD04		4822 242 73843	EMI FILTER, DSS306-91-F-223Z	FM12223010 FM12223010
LM91 LR91		4822 116 82487 4822 116 82487	CHIP, 0Ω 1/16W CHIP, 0Ω 1/16W	NN05000610 NN05000610
			<b>PU04-FRONT CIRCUIT BOARD</b>	
			<b>PU04-CAPACITORS</b>	
CU01		4822 126 11558	CER., 0.1 μF ±20% 50V	DA17104110
CU02		4822 126 10513	CER., 47PF ±5%	DA15470110
CU03		4822 126 11558	CER., 0.1 μF ±20% 50V	DA17104110
CU04		4822 124 80651	ELECT., 100 μF 6.3V	EG10700650
CU05		4822 126 11558	CER., 0.1 μF ±20% 50V	DA17104110
			<b>PU04-RESISTORS</b>	
RU13		4822 052 10101	100Ω ±5% 1/6W	GG05101160
RU17		4822 052 10101	100Ω ±5% 1/6W	GG05101160
			<b>PU04-RESISTOR(COMMON)</b>	
R***			CARBON FILM FIXED RES., ±5% 1/6W:RU01-RU12, RU14- RU16, RU21-RU26	
			<b>PU04-SEMICONDUCTORS</b>	
DU03 I		4822 130 81715	L.E.D., LT3K44B GREEN	HI10095320
DU07				
DU08		4822 130 80326	L.E.D., LT3D8B RED	HI10062320
DU09		4822 130 80325	L.E.D., LT3H8B AMBR	HI10064320
DU10		4822 130 80326	L.E.D., LT3D8B RED	HI10062320
DU11		4822 130 80326	L.E.D., LT3D8B RED	HI10062320
DU12		4822 130 81715	L.E.D., LT3K44B GREEN	HI10095320
DU13		4822 130 32362	DIODE, 1SS176, MA165, 1SS25430V 0.1A	HD20002000
QU01		4822 130 10684	PHOTO UNIT, RPM-674CBR-L	HW10003210
QU02		4822 130 42298	TRS., (2SC) C536SP, C2458, C3311, C1740S	HT30001000
QU03		4822 130 42715	TRS., (2SA) A608SP, A1048, A1309, A933S	HT10001000
			<b>PU04-MISCELLANEOUS</b>	
JU01			JACK, FFC CONNECTOR	YJ07011990
SU01 I SU07		4822 276 20508	PUSH SW., ALPS-SKHVAE	SP01011280
			<b>PU54-SPK SW CIRCUIT BOARD</b>	
			<b>PU54-CAPACITORS</b>	
CP01		4822 126 10513	CER., 47PF ±5%	DA15470110
CP02		4822 126 10513	CER., 47PF ±5%	DA15470110
CP03		4822 126 10513	CER., 47PF ±5%	DA15470110
CP04		4822 126 11558	CER., 0.1 μF ±20% 50V	DA17104110
			<b>PU54-RESISTOR(COMMON)</b>	
R***			CARBON FILM FIXED RES., ±5% 1/16W:RP01, RP03-RP09	
			<b>PU54-MISCELLANEOUS</b>	
SP01		4822 277 21712	SLIDE SW., SSSS92	SS02021470
SP02		4822 277 21718	SLIDE SW., SSSS9-23Z	SS02030560

(VERS.:VERSION, U:U.S.A., F:JAPAN, K:FAR EAST, \*\*:EUROPE)

POS. NO	VERS. COLOR	PART NO. (FOR PCS)	DESCRIPTION	PART NO. (MJI)
SP03 SP04 SP05		4822 277 21718 4822 277 21712 4822 277 21712	SLIDE SW., SSSS9-23Z SLIDE SW., SSSS92 SLIDE SW., SSSS92	SS02030560 SS02021470 SS02021470
			<b>PV04-TRIM VOLUME CIRCUIT BOARD</b>	
			<b>PV04-CAPACITORS</b>	
CV01 I CV06 CV13 I CV18 CV53 I CV64		4822 124 21894 4822 124 21894	ELECT., 10 μF 16V ELECT., 10 μF 16V	EJ10601610 EJ10601610
		4822 122 40588	CER., 22000PF ±20% 25V	DA17223110
			<b>PV04-CAPACITORS (COMMON)</b>	
C***			ELECTROLYTIC CAP. TOLERANCE ±20% CV51, CV52	
			<b>PV04-RESISTORS</b>	
RV01 I RV06		4822 101 11662	VARIABLE, 50K(K) L=22.5MM	RK05030850
			<b>PV04-RESISTOR(COMMON)</b>	
R***			CARBON FILM FIXED RES., ±5% 1/16W: RV11-RV22, RV29-RV46	
			<b>PV04-SEMICONDUCTORS</b>	
QV01 I QV06		4822 209 83274	IC, NJM4560D	HC10007090
			<b>PV54-MASTER VOLUME CIRCUIT BOARD</b>	
			<b>PV54-CAPACITOR</b>	
Δ CV90		4822 122 40588	CER., 22000PF ±20% 25V	DA17223110
			<b>PV54-CAPACITORS (COMMON)</b>	
			ELECTROLYTIC CAP. TOLERANCE ±20% CV91, CV92	
			<b>PV54-RESISTOR</b>	
RV99		4822 101 11663	VARIABLE, 50K(VB)X6 MOTOR	RG05030230
			<b>PV54-RESISTOR(COMMON)</b>	
R***			CARBON FILM FIXED RES., ±5% 1/16W:RV91-RV96	